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Critical Realism, Value and Capital

A thesis submitted to Middlesex University
in partial fulfilment of the requirements for the degree of
Doctor of Philosophy

Andrew Nicholas Brown

Middlesex University Business School

July 2002

Abstract

'Critical realism' is a philosophy and method first systematised by Roy Bhaskar in the 1970s and now finding broad appeal across the social sciences. The striking claim of critical realism to remedy the perceived malaise within the contemporary social sciences and Marxism, and thus to provide the philosophical and methodological basis for comprehending the global economy, coupled with the growing popularity of critical realism, demands that critical realism be examined thoroughly from its philosophical essence to the implications it has for the theory of the global economy. Such an examination is carried out in this thesis. Despite the many appealing aspects of critical realism the thesis puts forward a negative critique of critical realism that is unique in its breadth and depth. The critical realist philosophy is argued to collapse to Humean scepticism; the critical realist method is argued to be incongruent with the critical realist transformational social ontology. Alongside the negative critique, the thesis contributes a positive statement of a Marxist alternative to critical realism. Regarding philosophy, the 'materialist dialectics' detailed by the little known Russian philosopher, E.V. Ilyenkov, is argued to offer the basis for Marxist philosophy. As regards method, the Hegel inspired 'systematic dialectics', once recast on the materialist basis provided by Ilyenkov, is argued to transcend the critical realist method. These positive alternatives to critical realism are developed and brought together through a novel interpretation of Marx's theory of value and exploitation. Contrary to traditional interpretations, Marx's theory of surplus value does not *rest upon* Marx's labour theory of value. Rather the opposite is closer to the truth: the theory of surplus value is a key step in *substantiating* the labour theory of value. This interpretation is a contribution to the critique of various idealist theories of value, including those under the umbrella of 'value form theory'. The interpretation is argued to be a philosophical, methodological and theoretical 'deepening' of certain existing interpretations of Marx's *Capital* that stress the importance of distinguishing between the 'organic composition of capital' and the 'value composition of capital'. This deepening, enabled by materialist dialectics, is argued to remove some of the philosophical, methodological and theoretical obstacles that stand in the way of the collective development of a Marxist theory of contemporary global capital.

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If the thesis were to be judged on the quality and quantity of comments received upon drafts of the various chapters within it then it has been a great success – notwithstanding the fact that few, if any, of those who have commented agree with the argument herein! In addition to the comments of the above named people I am very grateful for the comments of Chris Arthur, Bill Bowring, Chris Brown, Rosemary Brown, Andrew Chitty, Hans Despain, Howard Engelskirchen, Niccolo Figa-Talamanca, Adrian Haddock, Mervyn Hartwig, David Harvie, Nick Hostettler, Martin Jenkins, Andrew Kliman, Clive Lawson, Corrina Lotz, Warren Montag, Simeon Scott, Gil Skillman, Tony Smith, Dirk Willenbockel and five anonymous referees from the *Cambridge Journal of Economics*.

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Published Material

Chapter 1 of this thesis contains material published as part of 'The Marriage of Critical Realism and Marxism: happy, unhappy or on the rocks?', a chapter co-authored with S. Fleetwood and J. Roberts in Brown, A., S. Fleetwood and J. Roberts (eds), *Critical Realism and Marxism*, London: Routledge (2002).

Chapters 3 and 4 of the thesis contain material published as 'Developing Realistic Philosophy: from critical realism to materialist dialectics' in Brown, A., S. Fleetwood and J. Roberts (eds), op. cit. Material from these chapters has also been submitted to the journal *Historical Materialism*.

Chapter 5 of the thesis contains material to be published as part of 'Driven to Abstraction: Critical realism and the search for the "inner connection" of social phenomena', an article co-authored with Gary Slater and David Spencer forthcoming in the *Cambridge Journal of Economics*. The chapter also contains material in the discussion paper, 'Developing Realistic Methodology: How new dialectics surpasses the critical realist method for social science' (1999), Middlesex University Business School, Economics Discussion Paper, No.66.

The Appendix to the thesis reproduces the editorial introduction to the symposium on Robert Brenner and the World Crisis in *Historical Materialism*, 1999, Issue 4. I was main author of this editorial.

Abbreviations used in this thesis

CNS: Central Nervous System

Dialectic: Dialectic and the Pulse of Freedom (Bhaskar, 1993)

FEW: From East to West (Bhaskar, 2000)

PE: Plato, Etc., (Bhaskar, 1994)

PON: The Possibility of Naturalism (Bhaskar, 1989a)

RR: Reclaiming Reality (Bhaskar, 1989b)

RTS: A Realist Theory of Science (Bhaskar, 1978)

SEPM: Synchronic Emergent Powers Materialism

SRHE: Scientific Realism and Human Emancipation (Bhaskar, 1986)

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Chapter 1. Introduction

The Contemporary Social Sciences, Marxism and the 'Global Economy'

The point of departure for this chapter and for the thesis overall is the deficiency of the contemporary social sciences. It can scarcely be denied that the comprehension of what is commonly termed the 'global economy' is an essential task for the social sciences. The global economy is exulted by neo-liberalism and has come to form the object of recent avowedly 'anti-capitalist' protest. However, the contemporary social sciences are ill equipped to theorise such an object. Mainstream economics considers the global economy only within the confines of individualistic and formal models of market exchange (Fine, 2001a). Other social sciences are doubly disadvantaged: (1) their main object has never been the economy; (2) the rise of postmodernism entailed rampant relativism and subjectivism precluding, in the extreme, any rational debate, let alone recognition of the objective character of global capital.

Signs of a recent retreat from postmodernist extremes have merely served to underline the endemic weakness of the contemporary social sciences. For, alongside the retreat from postmodernism has been the 'colonisation' of other social sciences by mainstream economics (Fine, 2001a). On the basis of market imperfections, the economics discipline has increasingly applied its barren method and theory to non-economic phenomena. Despite its conceptual impoverishment, this movement has become influential across the social sciences. Thus, instead of an appropriation of the economic by the other social sciences (a return to political economy) that might have been expected after postmodernist excesses, the opposite has occurred! As long as the split between economics and 'the rest' – or the paradoxical colonisation of the latter by the former – characterises the social sciences, the prospects for a social scientific theory (from within or without the economics discipline) adequate to comprehending the global economy appear to be non-existent.

Marxism, which has always held out the promise of grasping society as a totality, should offer much better prospects for comprehending the global economy than mainstream social science. However, the following contemporary divisions and

debates within Marxist thought can be highlighted, ordered according to their relative level of abstraction:

- (1) Marxist philosophy and method: The debates regarding Hegel, dialectics and the very notion of 'Marxist philosophy' are ongoing (see, for example, *Science and Society*, 2001, Volume 64, Issue 4). Prominent contemporary debates concern the two most recent attempts to develop a Marxist philosophy and method, viz. 'critical realism' and 'new dialectics' (e.g. Brown, Fleetwood and Roberts, 2002a).
- (2) Marx's theory of value: Despite being at the heart of Marx's *Capital*, the extraordinary variety of opposing interpretations of Marx's theory of value and surplus value continues, if anything, to grow (Desai, 1989; Fine, 1986; Saad-Filho, 2002). Mohun (1991, p.42) observes that 'virtually every controversy within Marxist economics is at bottom a controversy concerning the nature and status of value theory'.
- (3) The relevance of both (1) and (2) to the study of concrete historical conjunctures: In the wake of Althusserian philosophy and in view of the seemingly endless debates on value theory, there is widespread suspicion that neither Marxist philosophy nor Marx's labour theory of value are very relevant to the study of concrete historical conjunctures. Thompson (1978) remains a cogent statement of such suspicion; the editor's introduction to Brenner (1998) is a stark instance of contemporary antipathy towards Marx's value theory.

The extent of these divisions and unresolved debates appears to have been detrimental to the collective development of a Marxist theory of the global economy. A recent example is the debate concerning Marx's theory of economic development and crisis, sparked by the South East Asian crisis of 1997–8 and fuelled by Brenner (1998). Fundamental disagreements concerning value and surplus value dominated the debate (see, for examples, the symposium in *Historical Materialism*, 1999–2000, Issues 4–5 – the Appendix to this thesis reproduces the editorial introduction to the symposium). Such was the extent of this domination that very few contributions provided an alternative to Brenner's (severely criticised)

account of the trajectory of the global economy. Indeed, according to Fine, Lapavistas and Milonakis (2000, p.137), instead of 'addressing anew the historical specificities of contemporary capitalism... [the debate] seems to have exposed the collective deficiencies of contemporary political economy in this regard'.

Recent developments within the areas of philosophy and methodology offer a single diagnosis and cure for the travails of *both* Marxism and mainstream economics and social science. These developments have come to be systematised under the heading 'critical realism' and are the object of the critique presented in this thesis, as discussed below.

The Allure of Critical Realism to Practising Social Scientists and Marxists

In the context of such apparently bleak prospects for the comprehension of the global economy, the philosophy and method termed 'critical realism' presents itself as a beacon of hope. Many practising social scientists and Marxists have been drawn to critical realism over the past two decades and critical realism now has a presence within a formidably broad range of social scientific disciplines (Brown et. al., 2002b). In order to understand the appeal of critical realism it is useful to consider the respective traditional materials taught in philosophy of science and methodology courses aimed at practising social scientists, or students of social science.

Take, firstly, the 'philosophy of science'. Whilst there have been many diverse developments within the philosophy of science discipline itself it remains the case that the names of Popper (e.g. 1959), Kuhn (e.g. 1962), Lakatos (e.g. 1970) and Feyerabend (e.g. 1975) are likely to be the first that social scientists will invoke as exemplifying the 'philosophy of science'. The debate amongst these philosophers regarding both the correct description of, and the correct prescription for, scientific progress is by no means irrelevant to social researchers. The debate sensitises the researcher to issues surrounding 'falsifiability' and to the social context of science. However, the relevance might well be described as limited. Critical realism stresses that the debate does not contain much explicit reference to the nature of the mind-independent real world, even though some such world is a presupposition of the debate. In other words it is a largely epistemological debate, leaving the researcher

without purchase on the mind-independent world that is the object of research. The impression that can be left is that any 'abstract' discourse must inherently lack such 'real world' content and hence lack practical salience.

Turning to the diverse 'methodology' courses, here two broad strands can usefully (if, again rather sweepingly) be picked out. On the one hand there are 'quantitative' courses concentrating, for example, on the theory and practice of statistical inference. On the other hand there are 'qualitative' courses considering, for example, the theory and practice of questionnaire design. Both qualitative and quantitative courses and methods may have a positive role to play but they are often *difficult* to use in practice; i.e. in the context of a real world object. And, by their very nature, such courses must focus on the method rather than on the object. The impression, once again, is left that a high level of generality necessarily implies abstraction from explicit consideration of mind-independent reality (i.e. abstraction from ontology).

According to the critical realist argument, philosophy need not be a mere side issue, of little practical relevance. Critical realism articulates what practitioners often already feel implicitly to be the case. There are many concepts at the level of generality of philosophy that refer to the real, mind-independent world. Through such reference, these concepts are practically important. Firstly there is the basic fact of science itself. Through the hard practical effort of science, knowledge of the mind-independent real world is grasped. Remarkably this fact is not made explicit in the debate between Popper, Kuhn and Lakatos. It may be recognised implicitly, but the failure to make it explicit leads to an unwarranted divorce of philosophy from reality. For example the concept of 'paradigm' or its Lakatosian counterpart, 'scientific research program', refers to the realm of knowledge rather than the object of that knowledge, the real world. Critical realism demonstrates that the Kuhnian / Lakatosian perspective must have a real world analogue in *ontological* 'emergence'. The recognition that reality is layered in successive emergent strata is in turn able to explain the development of new 'paradigms' noted by Kuhn and Lakatos. The development of a new paradigm may simply correspond to the uncovering of a hitherto unknown stratum. More generally the notion of emergence is tied to the critical realist notions of structures, mechanisms, tendencies and, for the social realm, the notions of social structure and of the emergence of mind, hence of human

agency. All these notions refer to the real world, are practically useful and are located at the level of generality of philosophy. They are entwined philosophical concepts, articulated by critical realism, yet absent from the philosophy and methodology that is most familiar to practitioners in the social (and indeed natural) sciences.

The intuitive appeal of the critical realist ontology, coupled with the absence of ontological considerations from the philosophy and methodology traditionally encountered by social scientific practitioners, goes some way towards explaining the breadth of the popularity of critical realism. Critical realism thematises salient and general features that practitioners actually encounter in research, salient features of the real world. Thereby critical realism demonstrates that concepts at such a high level of generality (the transhistorical level) need not be lifeless, sterile or without practical import. Armed with the critical realist ontology it is possible to critique both the 'traditional' philosophy of science and the varied quantitative and qualitative 'methodologies' encountered by researchers. Critical realism foregrounds the need to adapt the research methodology to the object. Quantitative methods of statistical inference can be assessed in terms of their applicability to the object. Qualitative methods can be assessed on the same basis. The object itself can be grasped as a natural or social structure with attendant mechanisms. As a result the most prevalent *theories* within disciplines can be interrogated on methodological grounds. For example many theories existing under the rubric of poststructuralism, postmodernism and social constructionism stand revealed as one-sided: such theories recognise the conceptual aspect but not the objective aspect of science (Bhaskar, 1986; 1989; 1993). The converse trend towards greater and greater mathematical sophistication within economics can likewise be recognised as one-sided. Here the problem arises from recognition of the quantitative but not the crucial qualitative characteristics of the economy and human agency (Fleetwood, 1999; Lawson, 1997).

The critical realist argument would seem especially appealing for Marxism. As regards philosophy and method (1, above), it is useful to consider two well-known 'alternatives' to critical realism, both explicitly Marxist philosophies. Firstly there is the case of Althusserianism. The initial promise and subsequent demise of

Althusserian Marxism fostered attacks on the very notion of Marxist philosophy (e.g. Thompson, 1978). Althusserian Marxism was, ultimately, perceived to fail to uphold successfully a mind-independent reality, fallibly knowable by human agents endowed with free will. Critical realism attempts to uphold that promise, and thus is argued by some proponents (Collier, 1989) to fill the specifically philosophical gap left by the demise of Althusserianism.

Secondly there is the case of the many and varied strands of Hegel-influenced Marxism. The recent revival of such strands has prompted the coining of a new phrase, 'new dialectics' (Arthur, 1993a). New dialectics, in all its variety, does not *stress*, in the strident fashion of critical realism, a set of philosophical concepts that refer explicitly and clearly to a mind-independent reality. As a rough approximation, it is possible to characterise the varied strands of new dialectics as united by a rejection of Marx's own philosophical remarks to the effect that Hegel is an idealist. This contrasts sharply with the strident critical realist (and dialectical critical realist) critique of Hegel (Bhaskar, 1993; Creaven, 2000). Certainly it is critical realism, and not new dialectics, that articulates explicitly the key notions of the mind-independence of objects, structural causality, tendencies, emergence, stratification, the emergence of social structure and the emergence of agency (amongst other important notions).

The relevance of critical realism to the theory of value and to concrete studies of the global economy (2 and 3, above) is established, according to some proponents, by the assimilation of Marx's theory within the critical realist canon. Through critical realism, on this view, we can find 'the lost Marx' (Bhaskar, 1993; Collier, 1989; Marsden, 1998) – lost, that is, due to the hitherto unknown fact that Marx's method is implicitly that of critical realism. At the same time, the inadequacies of interpretations thrust upon Marx's theory of value in *Capital* by the predominant positivist or otherwise 'irrealist' (postmodernist, poststructuralist, post-Marxist, etc.) orientations can be exposed (Ehrbar, 2002; Fleetwood, 2002; Joseph, 2002). Moreover, a full blown Marxist framework for the theory of contemporary global capitalism, rooted in critical realism, is to be found in the Regulation Approach, as that approach is interpreted and developed by, for example, Jessop (e.g. 2002) and Peck and Tickell (e.g. 1992). Thus the Regulation Approach advances the terms

'Fordism' and 'Post-Fordism' in order to grasp post war capitalistic development. These 'middle-range' concepts build, so it is claimed, upon the abstract concepts contained within Marx's *Capital* in order to 'ground' concrete comprehension of contemporary global capitalism.

Thesis Aim

The striking claim of critical realism to remedy the perceived malaise within the contemporary social sciences and Marxism, and thus to provide the philosophical and methodological basis for comprehending the global economy, coupled with the growing popularity of critical realism, demands that critical realism be examined thoroughly from its philosophical essence to the implications it has for the theory of the global economy. Such an examination is carried out in this thesis. Despite the many appealing aspects of critical realism the thesis puts forward a negative critique of critical realism that is unique in its breadth and depth. The critical realist philosophy is argued to collapse to Humean scepticism; the critical realist method is argued to be incongruent with the critical realist transformational social ontology. Alongside the negative critique, the thesis contributes a positive statement of a Marxist alternative to critical realism that embraces the positive aspects of the latter. Regarding philosophy, the 'materialist dialectics' detailed by the little known Russian philosopher, E.V. Ilyenkov (1977; 1982; 1997), is argued to offer the basis for Marxist philosophy. As regards method, the Hegel-inspired 'systematic dialectics', once recast on the materialist basis provided by Ilyenkov, is argued to transcend the critical realist method. These positive alternatives to critical realism are developed and brought together through a novel interpretation of Marx's theory of value and exploitation. Contrary to traditional interpretations, Marx's theory of surplus value does not *rest upon* Marx's labour theory of value. Rather the opposite is closer to the truth: the theory of surplus value is a key step in *substantiating* the labour theory of value. This interpretation is a contribution to the critique of various idealist theories of value, including those under the umbrella of 'value form theory'. The interpretation is argued to be a philosophical, methodological and theoretical 'deepening' of certain existing interpretations of Marx's *Capital* that stress the importance of distinguishing between the 'organic composition of capital' and the

‘value composition of capital’ (Fine, 1983; Saad-Filho, 2002, ch. 6; Weeks, 1981, ch. 8).

The thesis as a whole can be read as a sustained argument that philosophy and theory mutually should inform one another on the basis of materialist dialectics. Chapters 2 to 5 interrogate Marxist *philosophy* (and method) through the detailed examination and critique of critical realism, and presentation of materialist dialectics. Chapters 6 and 7 demonstrate how Marx’s *theory* of value and surplus value can be better comprehended by drawing upon the philosophy of materialist dialectics. The failure to integrate philosophy and theory on the basis of materialist dialectics contributes to the stifling of the collective development of a Marxist theory of contemporary global capital.

Synopsis

The thesis proceeds, chapter by chapter, as follows. Chapter 2 serves as a preliminary to the critique of critical realism to be presented in the subsequent chapters. The origins of critical realism in the work of Roy Bhaskar (*RTS*; *PON*) are discussed, followed by an exposition of the broad features of the critical realist ontology and method. This exposition aims to capture the key features of critical realism as they are perceived by practising social scientists and used to interpret Marx. These features include the ‘transformational model of social activity’, social stratification, the method of ‘retroduction’ and the notion of abstraction. The chapter draws upon Jessop’s exposition of critical realism (1982; 1990; 2002), hitherto rather neglected in the economics literature on critical realism (Lawson, 1997, is the most prominent work within that literature). Finally, preliminary criticisms of critical realism are offered to set the scene for the detailed and immanent critique that follows.

Chapter 3 argues that the conceptual essence of critical realism is the critical realist theory of mind, termed ‘synchronic emergent powers materialism’ [SEPM]. According to the argument, the various strands of critical realism discussed in chapter 2 are tied together by this conceptual essence. The vexed question of the relationship between critical realism and Bhaskar’s later development of ‘dialectical

critical realism' (*Dialectic; PE*) is then taken up. Dialectical critical realism retains, indeed develops, the conceptual essence of critical realism and for this reason it is argued that dialectical critical realism both preserves and develops critical realism (this argument is consonant with Bhaskar's own view on the matter). The remainder of chapter 3 undertakes an immanent critique of critical realism and dialectical critical realism. SEPM establishes the mind-independence of reality in terms of a 'non-isomorphic' and causal relationship between idea and object. Yet given such a relationship between idea and object there is no *reason* why objects should continue to follow the 'known laws' established by science, and hence no basis for rationally produced knowledge. This is no more than a recapitulation of Hume's (1975) famous sceptical argument. An alternative to SEPM must be sought if the appealing insights of critical realism are to be salvaged.

Chapter 4 presents E.V. Ilyenkov's 'materialist dialectics' as an alternative to, indeed transcendence of, critical realism. The abstract basis of materialist dialectics is provided by Ilyenkov's interpretation of Spinoza. According to Spinoza adequate ideas are *based upon* an isomorphism between thinking bodily activity and the object of that activity; they are not *causal upon* human activity. In essence, adequate ideas arise from the ability of the thinking body to achieve self-awareness of its own outer bodily activity, where that activity accords with (is 'isomorphic' to) the object. Thereby the foundation of Humean scepticism, the causal and non-isomorphic relationship between idea and object, is removed. The chapter goes on to argue that the desirable features of critical realism (emergence, structural causality, etc.) are retained, but raised to a fundamentally new conceptual level, by Spinoza. However, Spinoza's philosophy is valid only at the most abstract level. Marx develops Spinoza fundamentally by stressing the transformative power of human labour: the labourer transforms the *object* of their activity as well that activity itself in the course of their labour. In the final section of the chapter it is argued that contemporary and Hegel-inspired new dialectics fails to overcome Humean scepticism in the manner of Spinoza and hence is ultimately idealist in the same way that, on Ilyenkov's interpretation, Hegel is idealist. (No attempt is made to interpret Hegel himself in this chapter or in the thesis overall).

Chapter 5 moves from the level of philosophy to that of methodology. An immanent critique of the critical realist method is undertaken. The branch of new dialectics termed 'systematic dialectics', once recast on Ilyenkov's materialist basis, is then offered as an alternative to the method of critical realism. Once more the critique turns on the distinction between an idea and its object. The non-isomorphism between an idea and its object stressed by critical realism provides the fundamental rationale for the critical realist method of 'retroduction'. Yet, given this critical realist rationale, such a method is incapable of grasping the self-transformation of social structures. This is because the 'social forms' that are premises for retroduction cannot, given the non-isomorphism of idea and object, contain any information regarding social structural self-transformation. Systematic dialectics, by contrast, does not advocate retroduction. Instead systematic dialectics provides a method whereby the interconnection of social structures can be grasped in thought, in a step by step manner, beginning with the most abstract and simple concept and developing ever more concrete and complex concepts through identifying and overcoming contradictions in the more abstract and simple concepts. The example of the opening chapters in Marx's *Capital* is used to illustrate the method. However, this example ignores crucial issues in value theory that are the subject of chapters 6 and 7.

Chapter 6, the first of two theoretical chapters, develops an interpretation of Marx's labour theory of value based upon the materialist dialectics presented in the previous chapters. It is argued that this interpretation of Marx's labour theory of value provides the basis for recasting the contemporary social sciences. This chapter (and the next) thereby illustrates the practical worth of materialist dialectics, and the errors of both critical realist and Hegel-inspired systematic dialectic interpretations of value. The premise, drawn from materialist dialectics, that common powers are tied to common material forms is argued to be sufficient for the validity of Marx's opening arguments in *Capital*. The exchange relation of commodities implies that they have some material form in common but it is evident that there is no *natural* material property shared by commodities, and systematically related to exchange value. Their only remaining material quality is their *social* existence as products of human labour. Hence the substance of value must be human labour. The abstraction inherent in exchange must reflect the perversity that the labour that is the substance

of value is lacking in all particularity and specificity; it differs from one commodity to another only in quantity, i.e. it is 'abstract' (and 'ghostly') labour. For this reason, the value of one commodity (the relative-form) must reflect itself in the use-value of another (the equivalent-form). Only once expressed in the 'universal equivalent', i.e. the money-form, is value expressed adequately. The lack of the aforementioned materialist premise within (contemporary and Hegel inspired) systematic dialectics explains the systematic dialecticians' view (and, more generally, the view of 'value form theory') that Marx's argument regarding labour is invalid and the resulting failure of systematic dialecticians to provide a consistent value theory.

Chapter 7 argues, in contradistinction to traditional interpretations, that Marx's theory of surplus value is a crucial step in *substantiating* the labour theory of value; it is not a deduction *resting upon* the labour theory of value. Once again the materialist dialectics outlined in previous chapters proves crucial, in this case to the theory of surplus value. The labourer, according to materialist dialectics, is defined by the ability to creatively and purposefully transform both themselves and the object. What is paid for by the buyer of labour-power is this adaptive and creative ability. The quality and quantity of labour received on consumption of labour-power (some specific contribution of labour to the production process, i.e. new and fresh labour) is not predetermined on sale of labour-power. On the contrary, the quality and quantity of actual labour performed is to be determined (within certain important limits) by the buyer of labour-power. Surplus value is possible only because, in the case of labour-power, what is paid for does not determine the contribution to the production process that is received. It follows that unpaid ('surplus') labour is the *cause* and *substance* of surplus value and *therefore* (ignoring realisation problems) it is the necessary and sufficient condition for positive profit. The chapter goes on to illustrate how the interpretation of Marx on value and surplus value can be developed so as to tie in with Fine's (1983) and Saad-Filho's (1997b; 2002) exposition of the transformation of values into prices. The exposition highlights the distinction between the 'value composition of capital' and the 'organic composition of capital', and provides the kernel from which the more concrete work of Fine and others can be developed.

Chapter 8 concludes by revisiting the main arguments of the thesis now stressing the positive alternative to critical realism, 'materialist dialectics', that has been, in the main chapters of the thesis, introduced as transcending critical realism and then developed through the exposition of value and surplus value. The chapter argues that the comprehensive critique of critical realism, the critique of new dialectics at the level of method and of theory, and the distinctive interpretation of Marx's theories of value and surplus value provide worthy starting points for further developments at a range of levels. Furthermore it is argued that the thesis, by culminating in the novel exposition of value and surplus value, is a philosophical, methodological and theoretical deepening of a distinctive approach to global capitalism (and political economy more generally) pioneered by Fine (e.g. 1989) and Weeks (e.g. 1981). It is hoped that the thesis will thereby contribute towards taking Marxist theory forward, on the firm basis of materialist dialectics, revealing the power of Marxist theory across the social sciences and providing a platform for the true comprehension of the global economy.

Chapter 2. Critical Realism in Marxism and the Social Sciences

Introduction

This chapter serves as a preliminary to the critique of critical realism to be presented in the subsequent chapters. The chapter discusses the origins and development of critical realism within the social sciences and Marxism. A broad overview of, firstly, the ontology and, secondly, the method of critical realism is then provided. This overview aims to present critical realism in the form in which it has come to be known within the social sciences and within Marxism. It therefore draws upon the work of a number of critical realist social scientists and Marxists, with particular emphasis upon the methodological work of Bob Jessop, hitherto rather neglected within sections of the critical realist community. Finally, preliminary criticisms are put forward in order to set the scene for the detailed and immanent critique that follows.

The Origins and Development of Critical Realism

Critical realism can be located within a loose hierarchy of ‘realisms’: ‘realism’; ‘scientific realism’ and ‘critical realism’. The terms are ordered by the generality of their meaning so realism includes but is not exhausted by scientific realism which in turn includes but is not exhausted by critical realism.¹ As used by philosophers, the term ‘realism’ does not refer to any particular school or position. Rather, it has a very broad meaning, connoting any philosophy that includes some significant degree of *mind-independence* of things.² ‘Scientific Realism’ is a term pertaining to the philosophy of science (both natural and social). It refers to all positions within this field that assert the independence of the objects of science from scientific practice. Often the criterion for the independence and reality of these objects is their causal

¹ Bhaskar looks at the varieties of realism in *RR*, pp.190–1 and more extensively in *SRHE*, pp.5–10. His definitions will be compared with those offered here in the proceeding footnotes. See also Hausman (1998).

² This is the definition given, for example, in Honderich (1995, pp.746–8). Bhaskar gives an even wider definition of ‘realism’, viz., ‘any position ... which asserts the existence of some disputed kind of entity (universals, material objects, causal laws, numbers, probabilities, propositions, etc.’ (*SRHE*, p.5).

power: if a thing causes some effect then it is real. Important authors within this category, from the critical realist perspective, include Hanson (e.g. 1963), Harre (e.g. 1970) and Hesse (e.g. 1974).³ The origins of ‘critical realism’, a subset of scientific realism, will be explained below.⁴

The most prominent advocate of critical realism, and author responsible for its original systematisation (though not its sole creator), is Roy Bhaskar. Bhaskar offers a particular realist account of natural science in *RTS* which he terms ‘transcendental realism’. He views this account as a ‘synthesis’ (*RTS*, p.9) or ‘systemisation’ (*PON*, p.2) of two strands within the philosophy of science: a scientific ‘realist’ strand exemplified by the work of the authors mentioned in the previous paragraph and a strand, possibly more widely known, associated with such authors as Kuhn, Popper, Lakatos, Feyerband, etc., emphasising the social character of science and the process of scientific development⁵ (these strands are not intended as precise or exhaustive distinctions). He advocates a suitably qualified version of transcendental realism, labelled ‘critical naturalism’, to account for social science in his second key book, *PON*, drawing upon social theory literature; Althusser being an important influence.⁶

‘Critical naturalism’ and ‘transcendental realism’ are now usually drawn together as ‘critical realism’ (*RR*, pp.190–1) which, in turn, has come to designate basic ‘critical

³ Bhaskar’s definition (*SRHE*, p.5) is equivalent to that given here. He does not make the causal criterion explicit, though it is evident in his work, e.g., *PON*, p.12.

⁴ Bhaskar presents his own view of the origin and basic meaning of the term ‘critical realism’ in *RR*, ch. 9.

⁵ This is a very important element of Bhaskar. The first strand influences what he terms the ‘intransitive dimension’ of science and the second strand the ‘transitive dimension’. These terms are explained below. Bhaskar argues that the two strands must be united under one ontology – furnished by Bhaskar himself as the essence of ‘transcendental realism’ – if their respective insights are to be upheld and positivism overcome.

⁶ There is no space to explore adequately the influence of Althusser on Bhaskar (indeed on the development of social theory in general since the sixties). On a purely textual level the link is shown by the reference to Althusser at the key stage of Bhaskar’s discussion of the ‘transformational model of human activity’ and Marx’s ‘historical materialism’ (see *PON* p.74, n. 43) as well as by numerous common terms and arguments. Bhaskar’s own account of his relationship with Althusser and Marxist thought in general can be found in *PIF*, pp.162–85 (see also *RR*, ch. 7). Collier (1989) brings out the relation of the authors very clearly suggesting that Bhaskar, in effect, solves the problems Althusser grappled with. Of course, interpretations of Althusser vary greatly even amongst critical realists (see below and Mephram and Ruben, 1979). Wal Suchting’s uncompromising critique of critical realism is strongly influenced by a very different interpretation of Althusser to that underlying critical realism (Suchting, 1992; Albury, Payne and Suchting, 1981).

realist' ideas evident in Bhaskar's seminal texts, rather than all the detailed arguments of his seminal texts and of his subsequent work (see below). A group of critical realists can be discerned who share, to a greater or lesser extent, these ideas, some of whom may be characterised as directly 'following' Bhaskar (Archer, 1995; Collier, 1994; Lawson, 1997), others at least clearly engaged in the same 'research programme' within which Bhaskar has become most prominent (Jessop, 1995; Outhwaite, 1987; Sayer, 1992). Some of the older members of each group are, or have been in the past, associated with the *Radical Philosophy* journal around which critical realism first came to prominence in the 1970s (the introduction to Mepham and Ruben, 1979, is a useful guide to the journal's discourse at the time). Younger critical realist researchers, who are spread across a number of different disciplines, do not share such a common heritage (see below). There is no hard and fast distinction between scientific realists who can be labelled 'critical realist' and those who cannot. Moreover there is not total agreement within the critical realist group. Rather, there is a continuum of opinion within critical realism that forms part of the wider continuum that is scientific realism.⁷

Since the late 1980s there has been a remarkable rise to prominence of critical realism within 1) non-mainstream economics, especially within Post Keynesianism; 2) the sub-discipline of economic methodology (itself a burgeoning sub-discipline of economics). This has been largely due to the efforts of Tony Lawson, and those of his early proteges, all originally based at Cambridge University (see Fleetwood, 1999, for examples of their work and the reactions it has provoked). The list of speakers to the weekly *Cambridge Realist Workshop*, ongoing since 1990, reads as a *Who's Who* of the economic methodology sub-discipline, and attracts audiences of well over fifty. This development serves to emphasise how diverse critical realism has

⁷ An author need not openly subscribe to the label 'critical realist' to be included within the characterisation of it presented here. For example, Sayer (1992) never uses the term 'critical realist' but can be usefully characterised as such (he emphasises the methodological and transitive elements of critical realism and adds a detailed analysis of abstraction, see below). Bhaskar in a similar manner characterises Issac (1987), and others, as 'critical realist'. See *RR*, ch. 9 – the reference to Issac is given in f.n. 30. The characterisation may best be regarded as one sympathetic to Bhaskar's own usage of the term; he too might characterise certain authors as critical realists who may themselves prefer the term 'scientific realist'. The definition is becoming more accepted; for example Sayer (1995) is happy to describe himself as a critical realist.

become. Such diversity can have negative consequences in that critical realists in distinct respective groups may not come into contact with each other's work. The example of the relative neglect of Bob Jessop's work is given, and countered, below.

Simultaneous to the diverse developments of critical realism, Bhaskar's own work has developed from his seminal texts into what he terms '*dialectical* critical realism' (*Dialectic, PE*). However, Bhaskar's development of critical realism has not been reflected within the work of the majority of critical realist social scientists. For example Lawson (1997) is based firmly on Bhaskar's earlier work, mentioning dialectics only rarely, and is highly influential within the economic methodology discipline. This serves to emphasise that it is only the basic ideas systematised in Bhaskar's seminal texts that define critical realism across the social sciences. It is these basic ideas that are presented in the exposition below. The vexed question of the relation between Bhaskar's own further work and these basic ideas is important but cannot be addressed in this preliminary chapter. The question will be taken up in chapter 3 below where the abstract philosophical principles that underlie critical realism will be unearthed. Chapter 2 simply aims to present the general ideas of critical realism as they are understood by critical realist social scientists and by Marxists.

If dialectical critical realism has proved controversial, then Bhaskar's most recent development is considered little short of disastrous by most critical realists (Hartwig, 2001; Hostettler and Norrie, 2000). *FEW* is supposedly a development of dialectical critical realism but involves new age philosophy, religion and reincarnation. Though an examination of this latest and bizarre turn in Bhaskar's thought would potentially be very interesting, such an examination will not be undertaken within this thesis. The critique within this thesis does suggest that the disintegration of Bhaskar's philosophy is unsurprising.

Critical Realism for Marxism and the Social Sciences

The next two sections below will present the basic ideas of critical realism, as these ideas are understood by Marxists and social scientists. The sections will draw upon

the varied writings of critical realist social scientists such as Bob Jessop, Andrew Sayer, Derek Sayer, Tony Lawson, Andrew Collier and John Lovering, alongside Bhaskar's seminal texts. A key reference is Jessop. He a prominent advocate of the 'Regulation Approach' within political economy, which he has helped establish in the UK on critical realist foundations,⁸ yet he is not well known within all critical realist circles (for example Bhaskar has never referred to Jessop's work; Collier, 1994, does not mention Jessop; nor does Lawson, 1997). Jessop's terminology will be drawn upon, for the purpose, *inter alia*, of introducing Jessop's development of critical realism to a broader critical realist audience. Additional comments and footnotes fill in the broader differentiation of critical realism; in addition they serve to avoid misunderstandings due to the terminological similarity of critical realism and 'systematic dialectics' (the subject of chapter 4 below). A basic overview will be provided in the paragraph immediately below. The next section will address the critical realist ontology. In the subsequent section the critical realist method is presented. The final section articulates some preliminary criticisms in order to set the scene for the critique that follows in the subsequent chapters.

Prior to the detailed presentation below, the basic ideas of critical realism will first be presented in as clear and simple terms as possible. The starting point is the uncontroversial proposition that the world (natural and social objects and actions) is *complex*. Critical realism takes this proposition further, arguing that events only rarely have one single cause; instead, there are a number of causes giving rise to any one particular event. These causes are not neatly patterned or aligned; rather, they may be very different in origin and nature but they nevertheless all combine to produce the event. Take the example of writing a PhD thesis: this might be explained in terms of socio-biology, as (ultimately) caused by the genes; or psychology, as caused by the mental state of the author; or economics, as motivated by monetary considerations. While not all these proposed causes would be accepted by critical realism (see below), the important point is that no single cause fully determines the

⁸ Through making Jessop's interpretation of critical realism and resulting 'method of articulation' explicit this chapter will, it is hoped, persuade readers already acquainted with Jessop's theoretical work of the essential role of critical realism within it. Peck and Tickell (1992) provide a good introduction to the critical realist inspired regulation theory Jessop has helped bring to prominence (especially within the discipline of human geography); see also Jessop (2002).

event and so no mono-causal explanation is adequate. Thus, a critical realist would accept as causes of a PhD thesis both the particular mental state and the level of income of the author but it is only the chance combination of these and other causes that produce the event (the writing of a PhD thesis). The methodological implication is that in order to make sense of the complex world it is necessary to combine different modes of analysis, e.g., in the case of writing a PhD thesis, economics and psychology (as well as others, e.g. a theory of institutions which caused the relevant academic structure).⁹ The next two sections will elaborate upon this overview in the formal terminology of Jessop and of critical realism more broadly.

The Critical Realist Ontology for Social Science

For Bhaskar, critical realism is fundamentally an attempted answer to the question 'what must be the case for science to be possible?' under the basic assumption of the intelligibility of scientific activity (*PON*, ch. 1). In the hands of Jessop, Sayer (1992), Lawson (1997, especially part IV) and others the methodological aspect of critical realism is given prominence. Jessop offers the following summary:

The Marxian ontology [critical realism]¹⁰ implies that the world is full of contingently realised natural¹¹ necessities. This world is triply complex: it is divided into different domains, each having its own causal powers and liabilities; these domains are involved in tangled hierarchies, with some domains emergent from others but reacting back on them; and each domain is itself stratified, comprising not only a level of real causal mechanisms and

⁹ The emphasis on the need for different planes of analysis and upon the contingent relation of these planes may appear too strong to the reader who is familiar with critical realism. There are two reasons for this emphasis: firstly the main concern is with social science where, for reasons explained below, the multiplicity of planes is very apparent; secondly Jessop does emphasise the contingent relation of planes more than many other critical realists. Below it is shown that different structures and mechanisms can necessarily *coexist* (in this sense being internally related) while the form and outcome of their *interaction* is contingent, within certain limits (in this sense they are contingently related). Jessop emphasises the contingency of their interaction and accurately applies critical realism to political economy.

¹⁰ The claim that critical realism accords with Marx's thought is rebutted in subsequent chapters below.

¹¹ In a later work the word 'natural' is replaced by 'interactive' (Jessop, 1990b, p.17, f.n. 9).

liabilities but also the level on which such powers are actualised and / or can be empirically examined. (Jessop, 1990a, pp.162–3)

The starting point for understanding Jessop's summary must be the levels of the *actual* and *empirical* considered in general terms. The empirical level refers to direct empirical observation; the actual level includes the empirical level and in addition the ongoing flux of actual events that may or may not be observed.¹² A crucial part of critical realism is its particular insistence on the *theory-laden* nature of the empirical implying an ever-present discursive element to human understanding. Thus humans can only have mediated contact with the actual world. Unlike Sayer, Bhaskar and other critical realists, Jessop draws heavily on the particular discourse theory of Laclau and Mouffe (1985). This is an example of Jessop's willingness to borrow from controversial (non-realist, non-Marxist, or 'post-Marxist') sources that sometimes leads to the charge of eclecticism being levelled against him (see Bonefeld and Holloway, 1991).

Within critical realism the world is conceived of as a 'unity of diverse determinations'¹³ which refers to the fact that any object or event within it has many different aspects. For example any particular person plays certain economic and political roles; is made up of physical, chemical and biological elements; has a certain gender, colour, religious position etc. Each of these aspects (or 'determinations') corresponds to a distinct *domain* existing in the world.¹⁴ The basis of a domain is a set of *internal relations*, otherwise termed *necessary relations*, as is explained below.

¹² See Jessop (1982, pp.215–16); (1990a, p.207, n. 10). Jessop does not elaborate upon this aspect of critical realism immediately, referring to Bhaskar for more detail, though his later elaboration owes more, in fact, to the work of Sayer (e.g. 1992). Jessop includes 'agents' at the level of the actual but it is not clear that Bhaskar would concur with this view. Agents are *sui generis* real entities for Bhaskar, see below.

¹³ This is a phrase found in Marx's *Grundrisse* (Marx, 1973, p.100). Chapter 5 below suggests that systematic dialectics gives the phrase a very different meaning to that of critical realism.

¹⁴ Jessop uses the term 'domain' to refer to what critical realists would usually call 'stratum'. 'Domain' more usually refers to the ontological levels of 'real', 'actual', and 'empirical' (*RTS*, p.13). Jessop is not alone in his usage of the term; indeed Bhaskar sometimes employs this usage in *PON*, ch. 2, and subsequent work.

An internal relation is said to exist whenever a relationship confers new properties onto its elements (natural objects or social 'positioned-practices'),¹⁵ so altering their nature. For example a molecule is a combination of internally related atoms; in the social world, internal relationships include the marriage relation, where the social position-practice 'husband' necessarily entails the position-practice 'wife'; a landlord / tenant relation, in a similar manner, entails that the landlord exists as such only given the tenant and *vice versa*. These relationships contrast with an *external* or *contingent relation* where the nature of elements is unaltered by their relationship, e.g. the relationship of passers by on the street. A relation is *symmetrically* internal if the essential nature of both relata depends on the relation; it is *asymmetrically* internal if the nature of only one of the relata depends on the relation. Internal relations often come in sets – such a set is termed a *structure*.¹⁶

The critical realist conception of internal relations and structures raises important social theoretic issues including the question of the relationship between social structures and human agency. The *precise* specification of this relationship is perhaps a matter upon which no two theorists agree, even where there is general agreement as to the basic structure / agency duality within critical realism (see, for example, the exchange between Joseph, 1999, and Choudos and Hay, 1998). In *general* terms critical realism does have a common conception, although it is striking that it is nearly always presented in a *negative* way, viz., social structures do *not* automatically self-reproduce regardless of human agency so critical realism is *not* structuralist and, in turn, is *not* functionalist. Two aspects can be picked out here: (i) social structures endure only through agency, though rarely by direct intent, thus Bhaskar writes:

[P]eople do not marry to reproduce nuclear family or work to reproduce the capitalist economy. Yet it is nevertheless the unintended consequence (and inexorable result) of, as it is also a necessary condition for, their activity.

¹⁵ Sayer (1992, ch. 3) employs the term 'practice' to denote the basic elements of social relations. Bhaskar's 'positioned-practice' (*PON*, ch. 2) is sometimes a more helpful term.

¹⁶ An important point that Sayer and Jessop do not make is that different structures can themselves be internally related. That is to say the relation between relations can be internal. See *PON*, pp.42–4.

(*PON*, p.35)

(ii) social structures need not endure at all; agents may change their relevant actions which, themselves, may be complex. Sayer writes:

Actors are not mere 'dupes', 'automata' or 'bearers of roles', unalterably programmed to reproduce. The very fact that social structures are historically specific ... ought to remind us of the contingent status of social structures. (Sayer, 1992, pp.96–7)

Thus agency has the capability to transform as well as to reproduce social structures. It can be added that some natural phenomena will be internally related to the essential positioned-practices, due for example to biological necessities for food and shelter. Also groups and institutions will be internally related to the essential positioned-practices; the specification of these is a matter for substantive theoretical work (*PON*, ch. 2; *SRHE*, ch. 2; *Dialectic*, pp.152–72).

Part of the appeal of Bhaskar's seminal text on social science, *PON*, lies in his provision of a set of concepts to encapsulate and indeed clarify what has become the basic critical realist conception of structure and agency. His conception rests on reciprocal *dualities*: (1) the *duality of structure* states that society is both the *condition* and continually reproduced (or transformed) *outcome* of intentional human activity; (2) the *duality of praxis* states that agents activity should be considered as (normally conscious) *production* and (normally unconscious) *reproduction* (or transformation) of the conditions of production, i.e. of society. The emphasis on the reproductive and / or transformative aspects of social activity lead Bhaskar to call this model the *transformational model of social activity* (*PON*, ch. 2).¹⁷

¹⁷ An important feature of Bhaskar's elaboration of this model is the notion of *explanatory critique* that is developed in *SRHE* and later work. According to this notion, the comprehension (explanation) of a social structure may reveal that structure to be undesirable, such that the 'fact / value dichotomy' is broken.

In the critical realist analysis of causation the *sui generis* properties conferred by a structure are understood as *mechanisms*, i.e. 'ways-of-acting' or *causal powers and liabilities*. They are possessed by objects as a necessary result of their underlying structures. Thus, on a critical realist conception, objects necessarily behave in certain ways in certain situations because of their structure. For example, an aeroplane has the *causal power* of flight due to a *structure* that it possesses. This power may or may not be activated, depending upon contingent conditions such as the weather, the presence of a pilot, the existence of a runway, etc. Following the fundamental tenet of scientific realism, critical realism asserts that structures and mechanisms are *real*, they really exist, because they give rise to actual behaviour of things,¹⁸ even though they are abstract and may be unobservable. Hence a distinct ontological realm consisting of abstract but *real* structures and mechanisms is established, where these structures and mechanisms combine to generate the flux of the actual world.¹⁹ Returning to the concept of a *domain*, which was loosely defined above as corresponding to different objects, it can now be defined more precisely as referring to particular real structures and their corresponding mechanisms.

A causal chain of mechanisms within a domain can be analysed. Marx's analysis of capital is interpreted by some critical realists in this way. His references to *tendencies* and *counter-tendencies* (e.g. for the falling rate of profit) being understood as referring to different mechanisms along the causal chain of capital (Jessop, 1982, pp.96–7; Joseph, 2002; Marsden, 1998). A very significant additional point made only by Jessop is that counter-tendencies are typically located at lower 'levels of abstraction' reflecting his position that real structures are themselves stratified along levels of abstraction. This is seductive language, reminiscent of the method termed 'systematic dialectics' but the meaning that Jessop attaches to his statement will, in chapter 5 below, be argued to be very different to 'systematic dialectics'.

¹⁸ The precise conceptualisation presented here follows *PON*, p.170. Fine (2001b) notes that the relationships between structures and mechanisms and other key facets of critical realism are left rather vague in the critical realist literature. Fleetwood (2001) attempts to clarify these relationships.

¹⁹ Jessop tends to use the term 'real' solely to apply to structures and mechanisms. However, as Bhaskar makes plain (*RTS*, 56–8), events and empirical observations are just as real as structures and mechanisms. The point is that the latter constitute a realm ontologically distinct from the former. The main thread of the text will continue to employ Jessop's usage in order to maintain consistency with his terminology.

In considering the 'unity of diverse determinations' it is clear that the combination of different domains at the concrete level must be addressed. This brings into view a key aspect of critical realist ontology that Jessop terms *contingent necessity*.²⁰ An object necessarily possesses causal powers from a given structure but this does not mean the object always does the same thing. The actual *effect* of a given power depends on the specific concrete situation, for any one power may be counter-acted, modified or not brought into play at all, by other powers from different domains (or indeed, counter-tendencies within the domain). It is the specific *conjuncture*, i.e. the contingent relation of different causal chains, at the actual level that determines the event. Events are thus said to be *overdetermined*²¹ by multiple causal chains. Any domain yields necessary powers but these powers have contingent effects: hence the notion of 'contingent necessity'.

An important aspect of critical realism concerns Jessop's reference to 'tangled hierarchies' of domains.²² The *sui generis* properties conferred by an internal relation are termed, in this context, *emergent powers*. Their importance lies in their anti-reductionist implications: it is not illuminating to reduce an internal relation to its elements because that would eliminate emergent properties²³ and deprive science of its main object of enquiry, viz., real structures. This provides a justification for the boundaries of natural scientific disciplines: crudely, physics studies atoms and sub-atomic phenomena; chemistry studies the emergent powers of molecules; biology the emergent powers of cells. Thus there is stratification along different domains. It is a tangled hierarchy because higher strata such as the human domain can effect lower strata such as the biological domain (e.g. through pesticides). In the social realm structures tend to be more interrelated than in the natural realm hence Jessop's stress on the contingent relation of domains.²⁴

²⁰ Jessop (1982, pp.213–20; 1990a, pp.162–6; 1990b, pp.10–13).

²¹ Jessop often employs this term (which was, of course, made prominent by Althusser) but Bhaskar frowns upon it (*RR*, p.187).

²² An important aspect of critical realism that Jessop has not elaborated in any detail.

²³ Thus reductionist sociobiological explanations of behaviour, such as the one referred to in the example of writing a PhD thesis, are ruled out.

²⁴ See Sayer (1992, ch. 4); *RTS*, 163ff.; Collier (1989) and Collier (1994, ch. 4).

At this stage the fundamental propositions forcefully elaborated within Bhaskar's seminal texts can be revealed. Bhaskar argues that the concepts of necessity and causality in the real world – structures and mechanisms – are sustained by critical realism while at the same time theoretical indeterminacy holds at the actual level. This is particularly important to him because he sees it as a refutation of the positivism of the Anglo-American philosophical tradition which he considers to be logically implicit in much of the philosophy of science, both natural and social, and in many theories of society.²⁵ Bhaskar characterises positivism as the basically Humean view that causal laws are constituted by constant conjunctions amongst self-contained 'atomistic' entities (events) and that scientific enquiry therefore aims to seek out these empirical regularities in the world. However, once it is accepted that real structures and mechanisms exist it can readily be seen that regularities are unlikely to occur, except through experiment, because of the overdetermination of the actual world (this argument runs through *RTS*). In short, positivism is completely, and fatally, oblivious of the real stratum according to critical realism.²⁶

The exposition of the basic features of the critical realist ontology relevant to method in social science is now complete. Before moving to the method and its critique an important feature of critical realism should be briefly noted: in the 'hard sciences' of physics and chemistry scientific experiment performs the function of isolating

²⁵ The implicit positivist ontology is usually manifested in the view that constant event regularities are at least necessary to scientific laws, as in the well-known 'covering law' model of explanation. Lawson (1997, ch. 7) critiques econometrics for its adherence (whether implicit or explicit) to such an ontology. According to Bhaskar, Lawson and other critical realists, the implicit positivism reflects a neglect of ontology in favour of epistemology that, in turn, is due to what Bhaskar calls the 'epistemic fallacy'; the fallacy that *epistemological* enquiry is sufficient to answer *ontological* questions. A consequence is that explicit philosophical and social theories contradict their own implicit ontology, a situation Bhaskar describes as an 'ontological tension'. Bhaskar's *RTS* elaborates all these themes (see ch. 3 and ch. 5 below).

²⁶ The thrust of Jessop and, to an extent, Sayer emphasises this aspect of the critique of positivism. There is another related aspect of the critique running through *RTS*: positivism fails to consistently distinguish empirical observation from the actual world.

structures and mechanisms for their identification.²⁷ As indicated in the next section, an (acknowledged) problem for critical realist social science is that its object precludes experiment.

The Development of a Critical Realist Method for Marxism and Social Science

The critical realist ontology has been built upon by Bhaskar, social scientists and Marxists in order to provide a general method for social science, one that is argued by some proponents to be Marx's implicit method. This method is presented below. Firstly the basic distinction between the abstract and concrete, common to both natural and social scientific method, is presented; secondly the peculiarities of social structural stratification are described and shown to underlie the critical realist understanding of both individual social sciences and of sociology (or political economy) as a 'totalising' social science; thirdly the 'transcendental' procedure for appropriating social structures in thought is explained and illustrated by the critical realist interpretation of Marx's *Capital*. A number of preliminary criticisms are raised in the final section in preparation for the immanent critique that follows in subsequent chapters.

The Critical Realist Distinction Between the Abstract and the Concrete

The critical realist method in social science stems from specific differences of social structure from natural structure to be discussed below. Before examining these peculiarities of social structure the basic distinction between the abstract and the concrete, which serves as a general guide to all critical realist method, will be

²⁷ The relevant critical realist terminology, systematised in *RTS* and *PON*, is as follows: natural and social events normally involve the interaction of diverse mechanisms. Given this diversity and complexity, it is rare for a (scientifically interesting) constant conjunction of events to obtain. The world may therefore be described as an 'open system', a term most easily defined as referring to any situation where no (scientifically interesting) constant conjunction of events obtains. In a scientific experiment one single mechanism is isolated by eliminating, holding constant or otherwise controlling for, interaction with other mechanisms. In this manner a constant conjunction of events is obtained corresponding to a single mechanism. Such a constant conjunction of events defines a 'closed system'.

explained – the applicability of this distinction to the social world being the reason why the study of society can aspire to be ‘scientific’.²⁸

The social world is not a mass of separate events, nor is it one homogenous structure, rather, for critical realism, it is constituted by diverse structures whose resultant mechanisms combine to generate the flux of actual events. Each structure (and its resultant mechanisms) must be individually analysed since it is *sui generis*, requiring unique terms and concepts adequate to its nature. Individual social sciences have the task of abstracting from the social world concepts of the specific social structures underlying their particular object. In this sense they move from the concrete actual world to the abstract (but nevertheless real) structures and mechanisms generating their *explananda*. Once adequate theorisation of specific social structures and mechanisms has been obtained then these separate analyses can be combined in order to explain concrete phenomena. Such a procedure is necessary since events will usually involve more than one underlying structure. Jessop aptly characterises this as the ‘method of articulation’ since different social structures and mechanisms must be articulated in order to provide concrete explanation. Applications of the method often specify economy, state and civil society as basic social structures. Explanations of, for example, Thatcherism (Jessop, Bonnet, Bromley and Ling, 1988) articulate the identified mechanisms of these structures (‘value theory’, theories of state bureaucracy and theories of ideology might supply these mechanisms).

Thus the method stipulates a concrete to abstract movement to isolate individual structures and mechanisms followed by an abstract to concrete movement to provide explanation. Marx’s comments on the abstract and concrete in the *Grundrisse* and elsewhere are interpreted to refer the above outlined critical realist procedure. Marx writes that from ‘a chaotic conception of the whole ... I would then, by means of further determination, move analytically towards ever more simple concepts, from the imagined concrete towards ever thinner abstractions until I had arrived at the simplest determinations’ (Marx, 1973, p.100). Critical realists interpret these comments to refer to the procedure of abstracting real structures and mechanisms from the

²⁸ In Bhaskar’s terms, there is the ‘possibility of naturalism’ (*PON*, ch. 1).

concrete actual world (e.g. Jessop, 2002; Collier, 1994; Joseph, 2002). Having arrived at the 'simplest determinations', Marx continues: 'From there the journey would have to be retraced until I had finally arrived at the [concrete], but this time not as the chaotic conception of a whole, but as a rich totality of many determinations and relations' (ibid.). For critical realists, this corresponds to the abstract to concrete stage of critical realist method: the articulation of abstract structures and mechanisms in order explain concrete actuality (ibid.). An extraordinary feature of the relation of critical realism and systematic dialectics, explored in chapter 5 below, is that the latter emphasises precisely these same quotes yet gives them very different meaning.

Social Stratification, the Social Totality and Sociology

It was explained above how, for critical realism, social structures differ from natural structures because of the dualities in terms of which they must be conceptualised (they are both condition and outcome of human praxis). As a result, the nature of stratification of social structures is distinct – a distinctness which has methodological import. For natural science, stratification is exemplified by the vertical²⁹ explanation of a molecule as a structure of atoms; in turn these atoms are explained by sub-atomic entities. Vertical explanation in the social world differs as follows: (i) unlike natural structures, social structures are explained, if only at a very general level, by entities of their own kind – instead of descending from one type of entity to another, as in natural science (e.g. from molecule to atom), there is, in social science, essentially a movement from one set of positioned-practices to another set of positioned-practices.³⁰ Marx's references to 'economic base' and ideological

²⁹ Collier stresses the useful distinction between 'vertical' and 'horizontal' explanation. The former refers to the way in which one strata is 'explained' by that immediately below it (e.g. molecules by atoms); the latter refers to the explanation of an event by specification of the mechanism, or combination of mechanisms, that generated it (Collier, 1994, p.109).

³⁰ It is in this sense that the current author believes Bhaskar to be right to sharply distinguish natural and social structures in *PON*, ch. 2 ('right' in the sense of being consistent with the critical realist conceptual essence). The distinction has been subject to continuing criticism (e.g. Collier, 1994, ch. 8; Lawson, 1997, ch. 15) but in the general form presented above the distinction appears to be sound. This is not to deny that society, taken as a whole, is emergent from the natural world. Nor is it to deny that the various specific and concrete social products and practices are each of a *sui generis* nature. It is to affirm that there remains a fundamental level of discourse whereby social structures lose their *sui generis* status, in that they are all essentially positioned-practice relations. No equivalent statement can be made regarding the natural realm, according to critical realism.

'superstructure' are interpreted by critical realists to be postulated exemplars of such social stratification (Collier, 1989; *SRHE*, pp.158-9); (ii) conceptualisations of such interconnected social structures must be combined with a study of conscious agents' activity, seen as reproductive and transformative of social structure, in order to provide complete explanation of social structures (Jessop, 1995; Lawson, 1997, Part IV; *PON*, ch. 2).

Thus the individual social structures studied by specific social sciences are ultimately internally related to one another. Seen as a whole, working through the interconnections of social structures, these are likely to be symmetrical internal relations. For example 'economy', 'state' and 'civil society' may, to a greater or lesser degree, be necessary to one another's very existence^{31 32}. Because of the internal relatedness of social structures, and their transformational character, a single totalising study of society is required, in addition to specific social sciences. It has the task of grasping the totality of internal relations that constitute society and the reproduction and transformation of that society. This science should thus embrace individual social sciences and social psychology (*SRHE*, ch. 2) and is, for Bhaskar, *sociology* (Jessop and others claim a similar status for 'political economy'). The broad scope envisaged for sociology is matched, in actuality, by at least one single body of social thought, Marxism, so that 'sociology must either presuppose or usurp the place of just such a totalizing and historical science of society as Marxism has claimed to be' (*PON*, p.44).

³¹ It is important to note that this necessary *coexistence* of structures and mechanisms (making them internally related, in this sense) does not fix, though it may limit, the nature and form of their concrete *interaction* (so their relation is, in this sense, contingent). For example the mechanisms conferred by state structure on citizens remain distinct from the economic imperatives people face even though the economy and the state may be in a mutually functional relation. Sayer's distinction between necessary and contingent relations of structures (Sayer, 1992, ch. 3) and Jessop's 'contingent necessity' (see the previous section, above) refer to this latter meaning of 'contingency' (indeed Jessop's phrase attempts to capture both aspects of the relation). Bhaskar's totality of internally related social structures refers to the former meaning of 'contingency'.

³² Regulation theory, especially in the form championed by Jessop, can be seen in this light: *regimes of accumulation* correspond to historical periods where there is a high degree of mutual functionality, as in the regulationists' characterisation of *Fordism*. Where mutual functionality breaks down there is socio-economic crisis, as in the demise of Fordism (see Tickell and Peck, 1992).

The Appropriation of Social Structures in Thought: 'Transcendental Deduction'

So far two general features of the critical realist method have been outlined: firstly the basic distinction between abstract and concrete and, secondly, the distinctness and methodological import of social structural stratification. It remains to detail precisely how, within a critical realist framework, adequate concepts of individual social structures are to be obtained. This will be detailed below, completing the exposition of the method and leading to the immanent critique.

Critical realism takes very seriously the well-known limitation that experiment is, in general, unavailable to the social scientist. This is because experiment is at the heart of critical realist methodology for natural science (*RTS*). As in the case of the general methodology for social science, explained above, the specific method for theorising social structure stems from a difference between natural and social structure. Whereas, above, this difference lay in the nature of stratification, the relevant difference here concerns the relation of science to its object of study. Now natural scientific knowledge is, by definition, knowledge *of* non-social phenomena. So natural scientific knowledge is not itself part of the natural world, its object of study. By contrast social scientific knowledge is, by definition, knowledge of social phenomena. So, as a social phenomenon itself, social science, including the knowledge it produces, must be considered part of its own object. In this sense social science is *internal* to its object in a way which natural science is not. Many implications flow from this feature of social science; there is space only to draw out the main methodological implication.

The internal relation of social science to its object implies that the social scientist has privileged access to her object unavailable to the natural scientist. The sources of this access can be divided into two: (1) as a social agent the social scientist will have prior conceptualisations of her own social activity; (2) the social scientist will be able to draw upon accounts of the prior conceptualisations of other social agents of their activities (e.g. through formal interviews). And, of course, in general terms the social scientist has much more intimate knowledge of her object than can the natural

scientist ever achieve. The question for the social scientist is, then, how are prior conceptualisations of social activities to be used in order to generate adequate concepts of social structure. Here, as previously, the duality of structure is vital because it ensures a stronger link between social structures and the activities they govern than is the case for natural structures. Social activities reproduce and transform social structure even as they are governed (partly) by it. The social scientist is therefore able to make an informed hypothesis as to what positioned-practice system underlies a given set of activities (Collier, 1994; Lawson, 1997; *PON*, ch.2).

Bhaskar calls this critical realist procedure 'transcendental deduction'. According to Bhaskar transcendental deductions, or arguments, are species of retroductive ones where 'a retroductive argument moves from a description of some phenomenon to a description of something which produces it or is a condition for it' (*SRHE*, p.11). The distinguishing feature of the transcendental species is that its premises are social activities as conceptualised in experience (*PON*, p.50). They lie at the heart of critical realism because philosophy, as well as social theory, is constituted by them (*PON*, ch. 1). Bhaskar initially derived the notion from that of Kant but sees it as overcoming Kant's individualism and idealism and later characterises 'dialectical arguments' as species of transcendental ones (*Dialectic*, pp.107–8 and p.396).

Thus the social scientist must hypothesise ('non-actual') social structures and mechanisms from ('actual') pre-conceptualised social activities and social forms. This is a move from a perceptible effect to its imperceptible structural cause or condition. The scientist does not make this move purely through individual inspiration. Rather, for critical realists, the scientist is a social being and science is a social process, as understood through the transformational model of social activity (see above). Accordingly, the scientist is understood as drawing upon material and conceptual tools and forms in order to produce hypotheses. The conception, then, is of a vast social stock of knowledge, ideas, tools, etc. being drawn upon and developed by scientists. In particular, attention is paid by critical realists to a process of conceptual model building and development as an aid to producing hypotheses. Where new phenomena are encountered analogies and metaphors with previously established models and concepts are made so that 'something like a logic of analogy and

metaphor' (*PON*, p.12; Lewis, 1996) is employed. The crucial critical realist proviso being that science aims to establish the reality of what the models depict.³³ In social science, the process of hypothesising structures and mechanisms is specifically guided by the duality of structure that is unique to social science. The above outlined view of the 'transitive dimension' of science, and of the logic of analogy and metaphor, serves as a general background to this specificity of social science.

The Critical Realist Interpretation of Marx's Method

Further elucidation of the method is best achieved through the example of Marx's method in *Capital*, as interpreted by critical realists. This illustration is the one most often given by critical realists themselves (eg. *PON*, ch. 2; Brown et. al., 2002a, various contributions; Marsden, 1998; Pratten, 1993; Sayer, 1992, ch. 4).³⁴ According to Bhaskar:

Capital may most plausibly be viewed as an attempt to establish what must be the case for the experiences grasped by the phenomenal forms of capitalist life to be possible. (*PON*, p.51)

The phrase 'phenomenal forms' is interpreted by Bhaskar to correspond to the critical realist notion of 'social forms' or pre-conceptualised social activities. In order for an individual to undertake a social activity they must have some concept of what that activity is. For example 'commodity', 'exchange value', 'money', 'capital', 'wages', 'profit', etc. are economic concepts used necessarily by all economic actors. They represent social agents' prior conceptualisations of the social world. The social

³³ The distinction between the 'transitive' and 'intransitive' dimensions of science introduced by, and essential to, Bhaskar's work can now be understood. The transitive dimension refers to the socially produced and developing array of scientific practices, ideas, models, concepts etc. that produces and constitutes scientific knowledge; the intransitive dimension is the world of real objects which scientific knowledge attempts to capture.

³⁴ This aspect of critical realist method can be traced back to an initial article by Geras (reproduced in Geras, 1986, ch. 3). John Mepham (in Mepham and Ruben, 1979, Vol. 3, ch. 5) developed Geras' work and Derek Sayer consolidates and further develops the ideas in his *Marx's Method* (1983), a book which must be considered one of the most extensive realist accounts of the topic; Jessop (e.g. 1982), A. Sayer (1992, ch. 4), Bhaskar (e.g. *PON*, p.108), Marsden (1998), Fleetwood (2002) and other critical realists refer to it.

scientist is able to use such concepts (actual 'forms') as premises for the deduction of the underlying ('non-actual') economic structures and mechanisms that are their causes or conditions.³⁵ Consider the 'value form' and 'wage form'. On this interpretation Marx takes the prior conceptualisation of 'value' as the premise for the deduction of the 'law of value'. A specific social structure, where isolated commodity producers produce for market exchange, is hypothesised to underlie value and then a mechanism whereby exchange values are regulated by labour time is deduced from this structure. Similarly, the concept of 'wage' is premise for the hypothesis of a social structure where workers are divorced from the means of production (so that labour is 'doubly free'). From this social structure the mechanisms of labour power and its production of surplus value when put to use by the capitalist are deduced.³⁶

Once competing hypotheses of underlying structures have been made they must be tested empirically. Critical realists take seriously the high difficulty of experiment in social science relative to natural science. In the absence of experiment hypotheses are tested, for the most part, by their relative degrees of explanatory power regarding specific social phenomena (*SRHE*, p.107).

The critical realist interpretation of Marx's well known statement that 'all science would be superfluous if the outer appearances of things coincided with their inner essence' (Marx, 1998, p.1095) is provided by the movement from phenomenal forms to their underlying structures and mechanisms. Thus in the example of the wage form, the outward appearance of equal exchange, registered in the well known phrase, 'a fair days work for a fair days pay', masks the underlying inequality of surplus value production. Critical realists usually make a distinction between the

³⁵ Lawson (1997, ch. 15) argues that not just mere pre-conceptualisations, but partial event regularities, or 'contrastive social demi-regularities', such as the consistently poor relative economic growth rate of the UK, provide the crucial premises for transcendental deduction in social science. He explains such 'demi-regs' as analogues of experiments involving a primary group and a control group (e.g. randomised control trials). The key features of transcendental deduction are retained.

³⁶ Sayer (1987) emphasises the historical nature of the phenomenal forms, in that they are not present throughout history. Accordingly the structures and mechanisms derived from them are historically specific and are themselves *explananda* for detailed historical research. Sayer's emphasis on historical work rather than on structures and mechanisms sets him apart many critical realists. His rejection of the structure / agency dichotomy and of any form of Althusserian 'historical materialism' also have this effect (1983, postscript to second edition).

Marx's method of enquiry and his method of presentation. Again this is an interpretation of Marx's methodological comments. According to this interpretation the method of inquiry is, as explained above, a movement from appearance to essence. However, the method of presentation should move in the opposite direction, from essence to the explanation of appearances (Brown et. al., 2002a, various contributions).

For completeness, it should be noted that a minor disagreement can be discerned, amongst critical realists, regarding the precise route the deduction of structures and mechanisms from phenomenal forms should take. As shown above Bhaskar recommends the movement from prior conceptualisations (in this case of phenomenal forms) straight to social structures. Mechanisms can then be derived from these structures. Sayer (1979) recommends the realist procedure in natural science, of hypothesising mechanisms first and derivatively providing social structures.

Preliminary Criticisms

Before the immanent critique a number of preliminary criticisms will be raised. Some of these can be seen as developments and extensions of the very important critique of Sayer (1983) made by Patrick Murray, a 'new dialectician' (Murray, 1983).³⁷ Murray's work shares significant themes with that of Banaji (1979), who is also drawn upon below. The criticisms presented are considered preliminary either because they raise problems that can be resolved through development of critical realism's conceptual essence, or because, however damaging they appear to be, they fail to identify, and deal explicitly with, the critical realist essence, making them unpersuasive to critical realists themselves – i.e. they are not *immanent* criticisms.³⁸ Such an immanent critique will be proffered in subsequent chapters below. In the light of this immanent critique, the preliminary criticisms can be understood in a new

³⁷ Sayer now fully accepts Murray's criticisms. See Sayer (1983, postscript to the second edition).

³⁸ Suchting (1992) and Albury et. al. (1981) provide a range of criticisms of critical realism, of variable substance, which have had little impact partly, it might be suggested, due to their being 'preliminary' in the sense outlined.

light, as developments of the underlying critique, and, in this way, as aspects of a whole.

An accurate account of *Capital*, including its first chapters, will find that the movement of the analysis, and the location of concepts such as value, cannot be fitted into the critical realist framework. Three possible critical realist interpretations will be considered and then rejected: firstly, there is the standard critical realist view that the presentation should move from essence to appearance; secondly, it might be considered that Marx does not separate inquiry and presentation and so presents his analysis as a transcendental deduction from appearance to essence; thirdly it might be considered that *Capital* employs more than one transcendental deduction, each deduction being presented in turn, either from essence to appearance or from appearance to essence.

To evaluate these interpretations the actual presentation in *Capital* will be examined. The analysis starts at the commodity, moves to value, then oscillates back to the commodity, now termed the 'commodity-form', whose full development is the 'money-form'. There is then a movement to the concepts of surplus value and capital. Profit, interest, etc. are later developments still. Now, both one-way interpretations of this analysis can immediately be ruled out; for a linear essence to appearance interpretation would make the commodity the most essential concept and surplus value and capital inessential; the appearance to essence interpretation would make value the appearance form of money and capital the appearance form of profit. Thus both linear interpretations are unacceptable. This leaves the third view that there are several transcendental deductions presented sequentially. A number of difficulties count against this interpretation. The interpretation makes it difficult to comprehend the oscillation from commodity (appearance) to value (essence?) and back to the commodity-form, or money (appearance). Banaji (1979) takes to task Colletti, Della Volpe, Althusser and other theorists, who laid the foundations of the critical realist understanding of *Capital* (*PIF*, pp.162–85), on account of this failure to distinguish 'commodity' and 'commodity-form'. Further difficulties with the interpretation stem from the relation between the supposedly separate transcendental deductions. Concepts such as value recur, in different guises, throughout *Capital* implying that

there is some development of concepts between deductions; this suggests interrelations of deductions that are unaccounted for by the interpretation. More damagingly still, the actual examples of transcendental deductions in *Capital* cited by critical realists are incompatible. The concept of 'value' is a phenomenal form in the example of the value form, whereas, in the example of the wage form, it must be placed, in its development to surplus value, at the level of essence because surplus value is not immediately apparent in the wage or profit form (see previous paragraph).

More generally the concept of 'form' is used in a very loose and wide-ranging way by critical realists, denoting anything with social content. In addition to examples given so far, Bhaskar at one stage refers to the 'fact form' (*RR*, p.9) – such examples stretch the meaning of the term to the limit. Relatedly there is a question as to the ontological status of phenomenal forms: while it is clear that social activities are actual events, and that social structures are real entities, it is not clear what the ontological status of value, money, profit, etc. is. The problem is compounded by the fact that the entire capitalist mode of production is sometimes called by critical realists, following Marx, the 'value-form', or 'capital'. These two terms then acquire a double meaning since, as well as defining the capitalist mode of production, they are, as phenomenal forms, distinct elements within it, along with positioned-practice relations and other social products. More generally it can be noted that phenomenal forms and other social products are, for critical realism, products of society yet at the same time internal elements of that society – thus there is the peculiarity of an object that includes elements that it is supposed to produce.

Another general observation is that the method gives no indication as to precisely how structures are to be articulated. In practice this proves to be problematic so for example Stuart Hall comments that he is not an economist so finds it difficult to integrate detailed economic material into his analysis (see the exchange between Hall and Jessop in Jessop et. al., 1988, pp.99–122). The problem holds for the articulation of structure and agency, implicated in structural transformation, as well as in everyday events. Jessop employs the concept of 'strategy' as a mediating term in order to try and solve this problem (e.g. Jessop, 1983). Part of the difficulty lies in

the absence of any ordering principle for the articulation of mechanisms – stratification is complex, and resultant mechanisms may be, in any case, of equal weight. It is easy, therefore, for the analysis to become either too complex, or conversely, if analysis concentrates on only one or two mechanisms, too simple. It seems, then, that a ‘middle way’ must be found, not too many (over-complexity) nor too few (over-simplicity) mechanisms must be articulated. This requirement is, however, purely an artefact of the method, weakening its credibility.

Critical realism is clearly not a finished product. Many of the problems raised above have provided the impetus for theorists to develop the basis of critical realism, e.g. Jessop’s ‘strategic-relational’ analysis, indicated above. The crucial issue then becomes whether the preliminary criticisms can indeed be overcome by such development, or whether, on the other hand, they are manifestations of an irrevocably flawed essence. Below an immanent critique is presented that, if accepted, means that the latter is the case.

Chapter 3. A Philosophical Critique of Critical Realism

Introduction

The various aspects that constitute critical realism, as this philosophy is perceived by practising social scientists and Marxists, have been set forth in chapter 2 above. It remains to unravel the thread that ties these aspects together, to unearth as it were the 'conceptual essence' of critical realism, the essential philosophical principle upon which the various facets of critical realism are based (to establish, indeed, whether any such essence exists). It was noted in chapter 2 above that the question of the relationship between critical realism and Bhaskar's later development of 'dialectical critical realism' (*Dialectic, PE*) is vexed and that this is no more true than since the publication of Bhaskar's *FEW* (Hartwig, 2001; Hostettler and Norrie, 2000). The ability to locate the conceptual essence of critical realism will help to answer that question and thereby serve to give focus to the critique of critical realism and of dialectical critical realism. This chapter will uncover the conceptual essence of critical realism and argue that dialectical critical realism is a development of this conceptual essence (this argument resonates with Bhaskar's view on the matter, though Bhaskar would not refer to a common 'conceptual essence' of critical realism and dialectical critical realism). On this basis an immanent critique of critical realism and dialectical critical realism alike will be presented.

The first section of the chapter will argue that the critical realist theory of mind is the conceptual essence of critical realism. Having uncovered this essence, the next section of the chapter addresses the question of the relationship between critical realism and dialectical critical realism, arguing that dialectical critical realism is the deepening and enrichment of critical realism that Bhaskar declares it to be. This sets the scene for the penultimate section of this chapter that provides an immanent critique of critical realism and of dialectical critical realism. The critique is argued to be no more than a recapitulation of Hume's infamous sceptical argument. A final section concludes.

The Conceptual Essence of Critical Realism

According to Bhaskar (*PON*, pp.80–119), there exists some, as yet little understood, structure emergent from the brain and central nervous system (hereafter CNS) that ‘generates’ thought. Humans and other thinking beings possess the emergent power of thought because they possess this structure, a structure that could be labelled ‘mind’. Thought is a *real* and *emergent power* generated by some complex structure emergent from the brain and CNS. Without the brain and CNS, mind (and hence the power that it generates, thought) would not exist but, at the same time, the brain and CNS are not identical to mind. Rather, there is an (as yet unknown) structure that emerges from the brain and CNS; this structure is the ‘real essence’ of mind. The existence of this structure is confirmed by the power that it generates, viz., ‘thought’. In critical realist terminology the emergent structure defines a new ‘stratum’ of reality. The stratum of ‘mind’ is emergent from the (presumably) neurological stratum below it, and yet ‘rooted in’ that stratum. Bhaskar (*PON*, ch.3) dubs this theory of mind ‘synchronic emergent powers materialism’ (hereafter SEPM).

The notions of stratification and emergence can be applied to any two adjacent ‘strata’, such as mind and brain, atom and molecule, molecule and cell, and so on. This does not imply, however, that all strata are of equal importance conceptually. Rather, the mind / brain relation is the most abstract and simple relation in the sense that the ‘mind’ is the very medium of thought, the very medium through which the conceptualisation of *any* strata, indeed of anything at all, takes place. Any conclusions reached about the mind as such, including conclusions reached about the relation between ideas (generated by the mind) and their objects (outside of the mind), must delimit all other concepts and conclusions. The implications of the critical realist articulation of the mind / brain relation will be developed below.

SEPM and the Key Themes of Bhaskar’s Critical Realism

SEPM entails the notion that thoughts and sensations are *sui generis* causal powers causing a correspondingly distinct activity (intentional activity) and emerging from a distinct structure (a ‘real essence’ that might be called the ‘mind’) which, should it

ever be uncovered by science, will be unique. This analysis gives substance to important critical realist themes. Firstly the analysis substantiates the critical realist notion of a real world, of objects and actual events, external to, and independent of, but in a causal relationship with, human ideas and observation (Bhaskar calls this view 'ontological realism'). Secondly the analysis defines the theory-laden nature of observation by substantiating the notion that the idea and sensory perception of the object are very different to the object itself. An idea and its real object are in a 'non-isomorphic' relationship, i.e. SEPM defines the critical realist view that humans cannot 'step out' of all theory in order to 'map' concepts to objects as they 'really' are outside of human theory (Bhaskar calls this 'epistemic relativism'). Thirdly the irreducible 'theory-ladenness' of observation defined by SEPM ensures that, even where there is experimental control, it is ultimately a question of judgement as to whether, and to what extent, observations are 'in phase' with the real world (Bhaskar's 'judgmental rationalism').

Fourthly SEPM explains an important negative tenet of critical realism, termed the 'epistemic fallacy'. Bhaskar claims that, in general, Western philosophy has tacitly, or otherwise, considered statements about reality to be identical with, or at least reducible to, statements about knowledge of reality.¹ SEPM establishes, however, that the 'real essence' generating thought is some (as yet little known) structure emergent from the brain and CNS. This is an essence very different to that of the objects of thought such as electrons, atoms, molecules, etc. According to SEPM, thought *causes* intentional human activity. Such activity impacts upon real objects, which, in turn, causally impact upon thought. Only through such causal interaction is knowledge acquired. Given this view, it is clear that an object may be essentially independent of the process by which thought attempts to grasp that object. Hence statements referring to real objects (ontological statements) are not always reducible to statements referring to the process of knowledge acquisition (epistemological statements). It is an 'epistemic fallacy' to consider otherwise, and to focus upon epistemology at the expense of ontology.

¹ The clause 'tacitly, or otherwise' is important. Bhaskar is not claiming that all philosophers *intentionally* commit the fallacy.

Fifthly SEPM explains the precise critical realist specification of stratification and emergence. Accordingly, the notions of stratification and emergence are revisited below, in light of the discussion of SEPM. This will result in an enhanced understanding of critical realism that points towards dialectical critical realism, as will be argued subsequently.

SEPM and the 'External' Relation of Strata

On the basic critical realist conception a lower stratum provides the condition of existence of the stratum above it. As such the higher or emergent stratum is *necessarily* related to the root stratum. On the other hand, the root stratum can exist without the higher stratum; it is not necessary for the entities at the lower stratum to combine so as to constitute the higher stratum – the constituents of neurons do not necessarily come together to produce mind; equally, hydrogen and oxygen do not always combine to produce water. Thus, from this perspective, the relation between an emergent and a root stratum is *asymmetrically internal*. The higher stratum is necessarily (internally) related to the lower stratum but the lower stratum is only contingently (externally) related to the higher stratum. In fact, a move beyond this basic critical realist understanding of stratification reveals that the relationships between critical realist strata are subtle and complex. Collier, for example, distinguishes *three* different types of possible relationship ('ontological presupposition', 'vertical explanation' and 'composition'; see Collier, 1994, pp.130–4). Below, a sense in which a higher stratum can be considered external to the stratum from which it emerges will be developed, drawing upon the perspective opened up by SEPM. Clearly this is a different sense of 'external' to that employed above. The two senses of the term 'external' are complementary to one another in this case, despite the apparent contradiction between them. This subtle development of the critical realist conception opens the way for the subsequent presentation of dialectical critical realism, and of the relationship between dialectical critical realism and critical realism.

It is helpful to start from a familiar type of relationship, as exemplified by the landlord / tenant relationship. In this type of relationship one pole of the relation 'implies' the other pole: thus the notion of a landlord implies the notion of a tenant and the existence of a landlord implies the existence of a tenant. Note that the 'implication' holds for both thought and reality. It is possible to consider the notion of 'landlord' without *explicitly* recognising the necessary relation to a tenant but that notion *must* be at least *implicit*. In other words, it is impossible to grasp adequately one pole of this type of relationship without grasping the other pole adequately.

The critical realist conception of the relationship between strata (most clearly natural strata) can be understood in contrast to the type of relationship just outlined. SEPM establishes that the relationship between the mental realm (including ideas and observations) and that of real objects is non-isomorphic and causal. Accordingly, real structures can only be known through their *effects* on the senses (through direct perception, or through their effect on observable objects), where these effects are non-isomorphic to their structural cause. Given this view, then current knowledge of strata cannot, in isolation, yield knowledge of new strata. Any pure extrapolation from current to new knowledge would be an attempt to grasp a structure *before* its unique effects have been detected. It would be pure speculation rather than empirically grounded science. Conversely, on the critical realist view, a set of powers revealed at a higher stratum, such as, for example, the powers of water (e.g. boiling at 100 degrees, transparency, ability to quench a thirst, etc.) can be understood adequately without any knowledge – implicit or explicit – of the structure, at the stratum below, that generates these powers (H₂O as it turns out, in the case of water). Thus the notion of a molecular structure, such as H₂O, is, initially, no more than a scientific *hypothesis* competing with other hypotheses to explain observed powers such as those of water. 'Water', its powers (transparency, boiling point, etc.), is first grasped adequately at the level of the known, higher stratum, before the stratum below is uncovered (before H₂O is brought to light). There is *nothing* explicit or *implicit* in the adequate notion of powers at the higher stratum that enables the scientist to single out a unique underlying structure defining a new stratum. Instead, it is the task, ultimately, of scientific *experiment* to evaluate alternative hypotheses;

hypotheses that may, without experiment, remain equally plausible. In *this specific sense* the higher stratum can be said to be 'external' to its root.²

The Relationship between Critical Realism and Dialectical Critical Realism

The subtlety of the critical realist notion of stratification is well captured and developed by dialectical critical realism; or so it is argued below.³ The sense in which the relation between a higher (emergent) and lower (root) stratum is external gains suitably nuanced recognition through the following closely related features of dialectical critical realism (all recurrent themes in *Dialectic*): the emphasis on difference over unity; the stress on totalities which are 'subordinate', 'partial', 'open' or 'incomplete'; the non-linearity of the critical realist dialectic; the corresponding polemic against Hegel and 'cognitive triumphalism'; more generally, the notion of 'real absence' as the keystone of dialectical critical realism. These related features are considered in turn below.

It is well known that the relation between 'unity' and 'difference' is granted some considerable importance within the dialectical tradition. The critical realist 'stratified' ontology provides a particular slant on this aspect of dialectics. The notion of stratification gives substance to the dialectical notions of unity and difference. On the one hand, as equal members of the same hierarchy, strata have an aspect of unity (dualism or pluralism is rejected). On the other hand, the strata are not the same as, nor reducible to, one another; they have an aspect of difference (reductionism is rejected). The question then arises: is unity or difference of greater weight or significance? The discussion above emphasised that there is nothing explicitly or implicitly present in an adequate conception of the emergent stratum that connects it uniquely to the conception of the root stratum. Each stratum is constituted by a unique type of structure (generating *sui generis* causal powers and liabilities) which

² This sense is implicit in the critical realist literature but has not previously been made explicit to the author's knowledge.

³ The presentation below attempts to strip the relationship between critical realism and dialectical critical realism down to its bare essence. At no point does Bhaskar (*Dialectic*; *PE*) offer such a presentation.

is, as detailed above, adequately conceptualised in isolation from any concept of the root stratum. This is a matter of ontological significance. For, if an adequate concept of the emergent stratum does not require the presence of a concept of the root stratum, then, in *reality*, there is nothing *present* in the emergent stratum connecting it to the root stratum.⁴ Because of this, then, it is the aspect of difference that requires emphasis within the critical realist ontology. At the same time it is clear that the dialectical critical realist emphasis on difference is just that: an *emphasis* rather than an absolute dichotomy. This stress upon difference is counterposed by Bhaskar to Hegel's alleged overemphasis on unity arising (according to the interpretation of Bhaskar offered here) from Hegel's failure to recognise that different respective strata can be comprehended adequately in relative isolation.

A second well-known and much contested theme within the dialectical tradition, closely related to that of unity and difference, is that of 'totality'. Once again the critical realist stratified ontology lends itself to a particular slant on this issue. Whereas Hegel allegedly champions a notion of one single, all-encompassing and 'complete' totality, Bhaskar argues for a conception of 'multiple' totalities which may be 'subordinate', 'partial', 'open' or 'incomplete'. The critical realist conception of stratification contributes to Bhaskar's argument in at least two ways. Firstly the sense in which a higher stratum is externally related to a lower stratum entails that there could, in principle, be an infinite number of strata below any given strata; these strata could be related in all manner of different ways and there is no reason why their character should be shaped primarily by the totality of their relations. Indeed, given that they can be grasped adequately in relative isolation then an all-encompassing totality must be of secondary significance. Secondly the point that a lower stratum is externally related to a higher stratum ensures that there is always the possibility, indeed likelihood, of newly emergent strata (most importantly, the possibility of new social structures brought about by human agency), so that the real totality is forever incomplete and open.

⁴ Note, firstly, that the lower stratum is 'absent' from the higher stratum and that this absence is a facet of reality according to dialectical critical realism, as will be explained below. Secondly it is important to stress that the status of a concept as 'adequate' has, for critical realism, ontological connotations. Hence ontological conclusions can be drawn from the status of a concept as 'adequate' without committing the epistemic fallacy.

The question of the 'linearity' or otherwise of the dialectic is most easily grasped in terms of epistemological issues regarding the nature of the development of knowledge. Does knowledge display a single line of development or is it inherently multifaceted and uneven? Such epistemological considerations are addressed below. It is specifically ontological notions that are under consideration here. In ontological terms, the critical realist and dialectical critical realist stress on difference – the sense in which a stratum is such that it can be grasped in relative isolation – lends itself to the view that the relation between strata is not that of a linear development of one single thing or 'substance', rather it is non-linear; it is a 'leap' from one thing to another, reflected in the leap from a concept of a higher stratum to the concept of its root.

Finally the keystone of dialectical critical realism, the notion of 'real absence', expresses with precision the subtle nature of the relation between strata within critical realism as elaborated above. The term 'absence' is germane because it expresses precisely (and in contradistinction to Hegel) that there is, or need be, nothing explicitly or implicitly *present* in a given stratum that is intrinsically connected to the lower stratum. The complementary sense in which a higher stratum *is* necessarily related to its root, despite the emphasis on difference, is expressed through the dialectical critical realist view that the absence of lower or higher strata is itself a matter of ontology; *absences are real*. Bhaskar expresses this idea most succinctly – if apparently contradictorily – in the view that the absence from a given stratum of the lower and higher stratum is a case of the 'presence' of an 'absence'. As in the case of linearity, the motivation for the notion of 'real absence' can best be understood from the perspective of the critical realist epistemology. This is because the move to epistemology entails consideration of the *process* of scientific development and the notion of 'real absence' is key to the dialectical critical realist understanding of any process (in terms of dialectical critical realism, the move from a focus on the notion of stratification to a focus upon the notion of process is a move from the 'first moment' of dialectical critical realism to the 'second edge' of dialectical critical realism). Once epistemology has been considered it will be possible

to present the broader features of Bhaskar's polemic against Hegel and to summarise critical realism and dialectical critical realism.

The Critical Realist and Dialectical Critical Realist Epistemology

The critical realist notion of stratification yields a conception of the nature of science and scientific progress (a conception first developed in *RTS*). On the critical realist conception, the process of scientific development consists in the theoretical move from an effect, at one stratum, to its cause at the stratum below. The sharp distinction between each stratum entails that new knowledge is not intrinsic to current knowledge; instead, new knowledge requires the effects of new strata to be perceived, at first indirectly. It is the task of scientific experiment to isolate these effects (creating a 'closure'). Once isolated, then 'old' knowledge does become important. It is not the intrinsic meaning of old knowledge that is of use. Rather, old knowledge provides the scientist with *analogies* and *metaphors* and the like. In the face of unexplained phenomena, scientists 'borrow' concepts and models from established fields and 'stretch', 'distanciate' or distort their meaning in order to produce 'hypotheses' of fundamentally new strata to be, in turn, empirically tested. This process is 'retroduction' in critical realist terminology (see chapter 2 above).

Dialectical critical realism retains the critical realist conception of scientific method and progress (see especially *Dialectic*, ch. 1). The dialectical critical realist 'epistemological dialectic' is little more, in this case, than a gloss on the critical realist analysis. The dialectical critical realist notion of 'absence', highly flexible in its meaning, is introduced to stand in for both the absence from knowledge (explicit or implicit), and for the corresponding absence from actual events and the perception of those events, of deeper strata. It is thereby possible to view the process of science as driven by absence. Scientists are driven to overcome ('to absent') the anomalies, surprises and the like that arise at a particular level of stratification – these anomalies must themselves be conceived of as absences from knowledge, and from actuality, of deeper strata. The process of science thus provides one instance of the general dialectical critical realist comprehension of process in terms of 'absence' and of, in particular, human development as the 'absenting of absence'. The crucial point

Bhaskar makes is that, given this view, 'absences' must have ontological status and not just epistemological status, i.e. *absences must be real*; any other way, the reality of processes in general would have to be denied and they would have to be considered as no more than constructions of the mind.

Scientific development provides also an example of the 'non-linearity' of the dialectical critical realist dialectic. The non-linearity of the 'epistemological dialectic' is reflected in the continual 'distanciation' and 'stretching' of old concepts and models indicating that the development of new knowledge is by no means a smooth and intrinsic development of old knowledge.

Summary

Critical realism and dialectical critical realism are usefully summarised through Bhaskar's critique of Hegel. Bhaskar (in *Dialectic*) finds a catalogue of philosophical errors in the Hegelian dialectic. Hegel is alleged to overemphasise unity; absolutise totality; linearise the dialectic; identify thought and being; and ultimately to deny the reality of absence. Hegel is further castigated by Bhaskar for his alleged 'anthropomorphic' view that totality of strata are known or fully knowable. Such 'cognitive triumphalism' must, according to critical realism, be scotched: the non-identity of subject and object ensures that there is no reason why all being must be *conceivable* being, let alone why all being must be conceived of already; the 'open totality' ensures that there is always the possibility, indeed likelihood, of newly emergent strata (most importantly, the possibility of new social structures brought about by human agency), so that reality is forever incomplete and inherently impossible to grasp fully.

What then of dialectical critical realism? Is it a development of critical realism, as Bhaskar maintains, or does it step outside of the limits imposed by critical realist tenets, as Joseph and others argue? The exposition above (and, also, the critique below) supports the view that the critical realist theory of mind should be viewed as the 'conceptual essence' of both critical realism and dialectical realism alike. As Bhaskar makes clear, 'old' critical realism abstracted from the fundamental

philosophical issues bound up in the notions of change and development: issues of space, time and process central to the *dialectical* tradition of thought.⁵ Given its increasing stress on the transformation and development of natural as well as social structures, 'old' critical realism was ripe for 'dialecticisation'.⁶ So, while the move to dialectical critical realism required the embracing of an immense literature on dialectics hitherto absent from critical realism, the move was a logical development of critical realism. The presentation has shown that critical realism is robust enough to survive 'dialecticisation': the critical realist theory of mind (SEPM) remains central. The critical realist notions of stratification and emergence, along with the related critical realist concepts, are further developed by dialectical critical realism in line with this conceptual essence. The reasons underlying the mixed reception given to dialecticisation within the critical realist community are suggested below.

Three substantive reasons can be given for the mixed reaction to the dialectical development of critical realism (in addition to obvious point that the literature on dialectics inherently tends to be difficult, Bhaskar's work especially so). Firstly any large literature, newly incorporated into critical realism, would naturally take time to be assimilated into wider critical realist discourse, whatever the nature of the new literature. Secondly there is an 'anti-dialectics' hegemony within much of Western academia. Thirdly, though dialectical critical realism embraces the critical realist tenets, for the most part, within its so-called 'first moment', it is the novel dialectical notion of 'absence' – rather than the notions of stratification and emergence – that predominates within dialectical critical realism. Thus the 'old' critical realist themes

⁵ *Dialectic*, p.8.

⁶ Thus Bhaskar's first book, *RTS*, unequivocally states, at one point, that 'changes in things, I have argued, are explained in terms of unchanging things' (*RTS*, p.208). His second book, *PON*, concentrates much more closely on immanent structural change because the subject matter is social rather than natural structures. However, the postscript to second edition of *PON* makes explicit that natural structures, as well as social structures, are only relatively enduring. As soon as this fact of immanent structural change is focused upon then 'old' critical realism (the 'first moment' of dialectical critical realism) is found wanting conceptually; for, in this case, it is the underlying structures that are in flux as well as the events that they generate. Dialectical critical realism is borne, in part, as a response to this lacuna. As Bhaskar puts it at one point, 'at 2E [the 'second edge' of dialectical critical realism which contains the key notion of absence] the course of the deep structure of nature may indeed change, but to this backgammon is hardly an appropriate response' (*Dialectic*, p.36). In characteristically awkward fashion, Bhaskar is pointing out that dialectical critical realism is needed in order to conceptualise immanent structural change.

appear to lose their centrality. However, the presentation suggests that the critical realist tenets, most fundamentally the emergence theory of mind, can indeed be considered to be the conceptual essence of dialectical critical realism, despite Bhaskar's stress upon absence. This is because the presentation has attempted to show that the stress on 'absence' is, in fact, a logical development of the emergence theory of mind. The stress on 'absence' within dialectical critical realism illustrates that the most *abstract and simple* concept (the emergence theory of mind), and in this sense the conceptual essence, of dialectical critical realism, is not the most *fundamental* concept of dialectical critical realism (the concept of absence). Below, critical realism and dialectical critical realism will be subjected to an immanent critique that is simple and yet, it will be argued, fundamental.

Immanent Critique of Critical Realism and Dialectical Critical Realism

One simple possibility serves to lead the critical realist 'open' stratified ontology into contradiction.⁷ The ontology must embrace the possible existence of a structure (or force) which will cause, at some future date, the characteristic behaviour, or *defining tendencies*, of other structures to *change*. In other words the ontology opens up the possibility of a structure (or force) that will cause present scientific 'laws' to *cease to exist*. This possible structure can be termed, metaphorically, a 'time bomb'. The 'time bomb' structure envisaged here does not destroy objects in accordance with the 'known laws' of nature as would a literal 'time bomb', rather it destroys the world as 'known' to science, by ending the 'laws' of nature 'known' by science. Though not yet discovered, the 'time bomb' could be located at a deeper stratum than hitherto uncovered by science; or it could be newly emergent; or it could be simply an isolated and, as yet, undetected entity. Bhaskar's entire polemical argument for an 'open' totality and his stress on difference collapses in the face of the sceptical consequences of the 'time bomb' possibility, or so it will be argued below.

⁷ The critique in this section can be seen as a recapitulation of Hume's infamous sceptical argument as, for example, contained in Hume (1975, sections II–IV).

Firstly, it should be stressed just why the time bomb⁸ cannot be ruled out. As detailed above, critical realism and dialectical critical realism articulate a particular notion of the mind-independence of the objects of thought. An object, its nature and existence, need not depend upon the conception of that object. The human process of gaining knowledge of the object is irrelevant to the nature of the object itself. In particular, the nature of the object may be such that it is inherently out of bounds of human cognition. The object could, for example, be akin to a non-spatial entity, such as a force, but one that has no effect upon spatial entities, nor on any other entities that are detectable by humanity. This indeed is the key point of the notion of 'mind-independence', as envisaged within critical realism, dialectical critical realism, and many other forms of realism. The world could exist without humanity and there could be things that exist without humanity ever being able to detect them, even in principle, regardless of spatio-temporal constraints. It is from this basic (at first sight incontrovertible) premise which, so it would seem, only an idle philosopher would have the effrontery to deny, that the notion of a metaphorical time bomb flows. For, once inherently undetectable entities are allowed for in this way, then it is equally valid to allow that entities exist that are currently undetectable but, in the future, will take effect. And this effect will be determined by the nature of the object, not by, for example, the nature of mind. Hence, the drastic effect of completely changing some or all 'known laws' must be considered a possibility, if the critical realist and dialectical critical realist (amongst other realisms) articulation of the notion of mind-independence is not to be contradicted.

Secondly, the nature of this 'possibility' of a time bomb must be examined. An intuitive critical realist view might be to argue that a time bomb entity is possible but unlikely (indeed this is a view that many who are not critical realists would endorse). For, the existence of such a peculiar entity would seem a remote possibility given that all fundamental laws have, apparently, not changed in the past,⁹ and no structure

⁸ For the sake of readability, the term 'time bomb' will not be placed within quotation marks for the remainder of this section of the chapter.

⁹ Thus, the fundamental laws of physics and chemistry are ordinarily presumed to be universal through time and space. Of course, the nature and extent of scientific *knowledge* of them has changed and will continue to do so. Note, firstly, that the 'time bomb' envisaged above could possibly change all of the 'known laws' fundamentally and within a negligible (practically

likely to bring about such change has ever been discovered. Now, it should be stressed that the validity of this basic response *as such* is not what is at issue. Rather, the question concerns what the critical realist (or dialectical critical realist) notions of mind-independence and stratification truly validate as a response. It should be clear that the apparent lack of total change of all 'known laws' *so far* provides no evidence one way or the other as regards the likelihood of the existence of the time bomb. For, the time bomb is precisely an entity that, should it exist, will *not* and *cannot* be detected until it 'goes off' (at which point human life may cease, such that the bomb is never, in fact, detected by humanity). So the evidence shows, at best, that a time bomb has not *yet* gone off but the evidence reveals nothing about whether a time bomb exists or not. The evidence is equally compatible both with the view that the time bomb does not exist and with the view that the time bomb does exist. It must be concluded that, on critical realist and dialectical critical realist premises, it is inherently impossible to attach any possibility to the two eventualities in question. Science simply does not and cannot know *at all* whether or not a time bomb exists. The probability of a time bomb existing is inherently unknowable; it is *fundamentally uncertain*.

Exactly the same considerations apply to the question of just when the time bomb will go off, if it does exist. That is to say, if the time bomb exists, then humans must be fundamentally uncertain about when it will go off. Indeed, the bomb, if it exists, may go off *any second now*. Humans must be fundamentally uncertain as to whether or not it will do this. Let it be stressed, once more, that what is at stake here is not the question of whether or not it is *truly* the case that humans are fundamentally uncertain regarding this esoteric, if not downright ridiculous, notion of a metaphorical time bomb going off, any second. This seems patently not to be the case and, indeed, a materialist philosophy will be put forward below that is compatible with such basic intuition. Rather, the argument here is attempting to draw out the logical implications of the critical realist and dialectical critical realist ontology,

instantaneous) time period, or the time bomb could change just a few of them over time. The problem is that humans have no way of knowing either of its existence or of its impending effect. Secondly the 'time bomb' critique presented in this section demonstrates that the attempt made by dialectical critical realism to accommodate immanent structural change (see f.n. 6 above) fails precisely because dialectical critical realism retains the critical realist essence, viz. SEPM.

based, as this ontology is, upon a particular notion of mind-independence (a notion common to many realisms).

What, then, are the implications for the status of current knowledge? There are two relevant possibilities between which humans cannot discriminate. On the first possibility, there exists a time bomb that will go off any second now. If this is true then some, or all, 'known laws' will cease to exist, any second now. On the second possibility such a time bomb does not exist. Humans are inherently incapable of having any clue as regards which of these two possibilities is the truth. It is a matter of fundamental uncertainty. Note that this fundamental uncertainty regarding the time bomb entails fundamental uncertainty regarding the existence of the 'known laws': if the time bomb exists then some or all of them are about to cease; if it does not exist then they will remain. In short, given critical realist premises, humans are inherently, eternally and fundamentally uncertain about whether or not some or all 'known laws' are about to cease to exist. A very stark conclusion.

Even so, is it not the case that, as a matter of practicality, scientists, and humans in general, just 'get on' with life, anyway? Do humans not, effectively and quite reasonably, just plump for the second of the two possibilities, viz. that there is no time bomb? Hume stresses that this behaviour cannot be considered 'reasonable' if the notion of mind-independence (as, in this case, articulated by critical realism, and in Hume's time argued by Locke and others)¹⁰ is upheld. This is so because such a view of mind-independence leads, as argued above, to fundamental uncertainty rather than to some mere 'nagging doubt', which could reasonably be 'lived with'. Reason cannot lead to any action where it leads to total uncertainty; where there is not even a small inkling of which of the two key possibilities will occur. One response might be to accept only the view that carries a chance of survival. Certainly, this is a reasonable dictum but it does not help in the case under consideration simply because there is no way of working out which possibility carries the greatest chance of survival. For, the real outcome may entail that acting according to previously 'known

¹⁰ From the inception of critical realism, Bhaskar makes explicit the Lockean heritage of the critical realist notion of 'real essences' (e.g. *PON*, p.13).

laws' would lead to death, whereas acting according to some other set of laws, generated by the metaphorical time bomb, will lead to survival. Thus, it is equally as likely that acting in accordance with currently 'known laws' will lead to death, as it will not. The consequences of being inherently ignorant about the laws of nature that will exist a second from now are severe but this is precisely the implication of ignorance regarding the time bomb.

Consider an analogy. The assertion that a time bomb does not exist, on the grounds that the non-existence of a time bomb ensures my future survival, is *partially* analogous to the assertion that I *will* win the lottery, on the grounds that I *want* to win it. The difference is that at least with the lottery there is a definite and known chance of winning, albeit a slim one. So, though I would expect to lose, it would be worth making plans for the event of winning the lottery, if this eventuality were my only hope of survival. The metaphor of the time bomb, however, indicates a situation where I do not know anything at all about the nature of the world (the laws of nature) in the immediate future; I do not know anything so specific as that there is a lottery going ahead, so I cannot make any plans at all.

Consider also the practical consequences. To argue that humans can reasonably plump for the second (non-time bomb) option, is to argue that a scientist, without any evidence on competing hypotheses, can plump for one of them, just because they happen to like it. If they do that for the case of the time bomb, if moreover they base their entire 'science' upon such an arbitrary move, then science does not have foundation in reason at all. Indeed, a 'scientist' could not coherently rule out the analogous form of 'reasoning' (arbitrarily plumping for a preferred hypothesis without a shred of evidence) for *any* set of hypotheses, if such a form of 'reasoning' has been allowed in the time bomb case. That is to say the mode of 'argument' in question is the very *antithesis* of science; to adopt it, is to make science an unintelligible activity, to collapse critical realism by removing its cornerstone, the intelligibility of science. Thus these apparently esoteric philosophical concerns turn out to impinge directly upon concrete and practical matters. The practising scientist, given the critical realist articulation of mind-independence, cannot in fact practice at all. For, that scientist would have to face the question of the time bomb, and would

have to admit that it cannot be satisfactorily answered. The scientist would have to admit to ignorance regarding what things will be in the immediate future. Despite what appeared to be a wealth of knowledge regarding the essential structure of things, the scientist would have to admit to being ignorant of the 'essential structure' of anything because they would not have any clue as to what the laws of nature, in the immediate future, will be.

What if, despite all that has been argued above, the reader should feel that the idea of a time bomb is simply too ridiculous to worry about? And that anyone who does worry about it should just go and get medical help! Undoubtedly such a view is quite correct. But the *point* of the argument has not been to convince anyone that a time bomb really exists, far from it. Rather, the point has been to demonstrate that critical realism and dialectical critical realism (indeed, many other forms of realism) collapse due to the failure to rule out, in anyway whatsoever, the evident nonsense of a time bomb. The critical realist articulation of 'mind-independent' reality (in terms of a 'non-isomorphic' and causal relation between thought and its object) leads to the self-contradictory notion that a time bomb structure could exist somewhere in the universe. Any attempt to rule out the time bomb structure, on the ground that it leads to scepticism, would flatly contradict this articulation of the mind-independence of reality. There is, quite simply, no way out for critical realism and dialectical critical realism. If the deep insights of critical realism and dialectical critical realism are to be salvaged, then a fundamental reworking of the notion of 'realism' must be undertaken. A reworking which is able to cope with the evident nonsense of the time bomb possibility. Before embarking upon just such a reworking, the basis upon which it will be made is clarified below, by way of summary and conclusion.

Conclusion

In effect, the argument of this chapter provides a set of criteria for any coherent philosophy. Firstly the articulation of 'mind-independence' in terms of a non-isomorphic and causal relationship between thought and its object has turned out to be self-contradictory because it leads to scepticism. So in one way or another it must be replaced. Secondly the critical realist articulation of mind-independence represents

an attempt to uphold evident facts about reality. Thus critical realism appears to be difficult to deny without taking a position which is in flat and disingenuous contradiction with the practicalities of everyday life. The critical realist conception of mind (SEPM) is tied to a definite conception of ontological 'emergence' without which, as critical realism shows, it is very difficult to maintain a coherent philosophy. Furthermore there is, quite evidently, a big ontological difference between thought and the objects of thought. This difference would seem to entail a notion of 'mind-independence' along precisely the lines critical realism suggests. For, it seems quite evident that a 'thought' does not possess the same structure as its object; that, quite to the contrary, a thought is emergent from a very different structure than its object. Any attempt, against critical realism, to uphold an isomorphism of thought and its object, must deal with the evident ontological difference between the two. It must also deal with the evident practical, active nature of humanity and the process of gaining knowledge. How can the process of science, and indeed any human act at all, be grasped, if the critical realist attempt to do so fails? The causal theory of mind put forward by critical realism attempts to capture the active nature of science and humanity. What place for such activity in a non-causal theory of mind, and / or in a theory which takes object and concept to be identical? What place for Marx's famous dictum that *practice* is fundamental to knowledge, if practice cannot be articulated in terms of the causality of mind? These are the fundamental questions raised by this chapter. They are addressed below.

Chapter 4. From Critical Realism to Materialist Dialectics

Introduction

This chapter draws upon Ilyenkov's interpretation of Spinoza and Marx (Ilyenkov, 1977; 1997) in order to transcend Bhaskar's philosophy. Ilyenkov's philosophy is not well known. Though a 'materialism', Ilyenkov's philosophy does not embrace the reductionist identity theory of mind labelled 'materialism' and adopted by mainstream philosophy (see *PON*, ch. 3; Burns, 2000; Searle, 1993). Though a 'materialist dialectics' the philosophy has nothing to do with, indeed is utterly hostile towards, the Stalinist orthodox philosophy that served to give the term 'dialectical materialism' a very bad name. Ilyenkov's ideas are little known because he draws upon distinct and isolated debates amongst post-war East European philosophers, debates that flourished under the temporarily relaxed regime of Khrushchev only to be choked when orthodoxy reasserted its rule (Bakhurst, 1991; Banaji, 1979; Pilling, 1980). The few Western philosophers, or Marxists, who have grappled with Ilyenkov's work (Bakhurst, 1991; Chitty, 2000; Saad-Filho, 2002) each have very different interpretations of him, both with respect to one another, and to that presented in this chapter.

The very broad aim of the chapter necessitates that a range of philosophical themes are covered each of which deserve a great deal more space than can be afforded here. In view of this, the strategy of exposition adopted below focuses on two specific objectives. Firstly the exposition attempts to explore the relationship between Ilyenkov's materialist dialectics and critical realism. Secondly the exposition attempts to establish, against other contemporary interpretations of Ilyenkov (Bakhurst, 1991; Chitty, 2000; Saad-Filho, 2002), that Spinoza is central to Ilyenkov's philosophy. Ilyenkov argues that an isomorphism between human bodily activity and the object of that activity lies at the heart of Spinoza's philosophy but this argument is ignored by Ilyenkov's contemporary interpreters.

The opening section of this chapter provides an overview of the essence of Spinoza's philosophy and of the relationship between that philosophy and critical realism. This overview is presented in as clear and simple terms as possible, without being cluttered with citations. On Ilyenkov's interpretation, Spinoza provides a materialist theory of the identity, as well as the opposition, of thought and being. Thereby the foundation for Humean scepticism, as articulated in terms of a 'time bomb' notion in chapter 3 above, is overcome. The next section develops in greater detail, with numerous citations, Spinoza's revolutionary philosophy and the relationship of this philosophy with critical realism and dialectical critical realism. It is argued that the various appealing themes that critical realism tries to uphold, such as natural necessity, emergence and stratification are preserved and raised to a new conceptual level by Spinoza (this is a fundamental development, 'supersession' or 'transcendence' of critical realism). At the very least this section demonstrates, *contra* other contemporary interpretations, the importance of Spinoza to Ilyenkov's philosophy and the idiosyncratic – if illuminating – nature of Ilyenkov's interpretation of him.¹ The following section, again drawing upon Ilyenkov, assesses some of the limitations of Spinoza's philosophy. Spinoza does not recognise fully the fact that thinking beings transform the *object* as well as themselves through their labour. Marx, on Ilyenkov's interpretation, recognises the transformative power of labour and is thereby able to 'turn Hegel right side up' and develop a materialist dialectics. The implications of this argument for contemporary debates regarding Hegel and Marx are discussed briefly. The section suggests that Ilyenkov's critique of Hegel is applicable to contemporary 'new dialecticians'. (The question of the correct interpretation of Hegel himself is not addressed). A final section concludes.

Spinoza's Transcendence of Critical Realism and Dialectical Critical Realism

This section draws upon Ilyenkov's interpretation of Spinoza (Ilyenkov 1977, pp.11–74; 1997) in order to provide an overview, in as clear and simple terms as possible, of

¹ Though this chapter addresses contemporary interpretations of *Ilyenkov*, it does not attempt to engage in any detail with contemporary interpretations of *Spinoza*. It will simply be suggested that Ilyenkov's interpretation of Spinoza may be essentially different to what might very crudely be termed the 'new Spinozist Marxism' (e.g. Negri, 1994; Balibar, 1994; Montag, 1998; 1999, esp. pp.xiii–xxi). A separate study would be required to explore this avenue.

Spinoza's transcendence of Bhaskar's philosophy. Spinoza bases his theory upon a critique of Descartes, and it is with Descartes that the exposition below begins.

As is well known, Descartes was acutely aware of the dangers of scepticism as captured in the notion of 'Cartesian doubt' (there are some similarities between Descartes' 'evil demon' and the 'time bomb' invoked above). Hence, amongst other things, Descartes aimed to avoid the pitfalls of scepticism. Descartes developed a materialist principle that can be seen, in the terms of the critique of chapter 3 above, as an attempt to exclude the possibility of a 'time bomb' from the material world. According to Descartes, the material world is constituted by definite structures. A common principle underlies these structures, such that to know any one structure is enough to know the principle common to all structures. This common principle, necessarily possessed by any object, is not possessed by a 'time bomb'. The 'time bomb' is thereby ruled out. In other words all individual and particular objects instantiate a universal, such that knowledge of any object assures knowledge of the universal. The 'time bomb' is defined as an entity that does not possess the universal and hence cannot exist.

The problem, for Descartes, lay in his grasp of just what the common principle comprises. More specifically, it lay in his inability to square the principle, as he understood it, with thinking beings (a category which, for Descartes, excluded animals). For, Descartes grasped the principle in 'mechanistic' terms closely analogous to the pioneering conceptions of the natural science of his day (to which Descartes made, himself, major contributions).² According to this conception, all material structures of matter behave according to a simple 'stimulus-response' schema. Any impulse (stimulus) to a structure will set in play a chain of movement within the structure producing a definite response of that structure; a response predetermined by the particular structural configuration involved. More complex behaviour, on this view, is nothing but the result of a more complex structural configuration and, whatever the apparent complexity, is thereby fixed and

² It is a mechanistic conception analogous, also, to the mechanistic division of labour already present in early capitalism and to the machinery that later arises as capitalism becomes more developed.

predetermined such that the same stimulus, to the same structure, will always produce the same response.

Descartes well recognised that such a schema of action does not fit the behaviour of thinking bodies. For, as Descartes carefully described, the behaviour of thinking bodies is characterised by a break between stimulus and response. Thinking bodies reflect before acting in response to a stimulus such that their behaviour in the face of the same stimulus may change and adapt through time. Descartes noted the consequential characteristic trait of the thinking body. The activity of the thinking body is not fixed to a limited range of objects. Rather, the thinking body continually and fluidly strives to embrace *any* object that it may come into contact with. The activity of the thinking body thus has a *universal* character in contradistinction to the particular activities of non-thinking bodies. This meant, for Descartes, that the search for some structural configuration constituting thought must be fruitless because the associated activity is, precisely, *not fixed* and so can have no fixed structural 'determination' (limitation). Any structure constituting thought would have to contain equivalent structural complexity to all other structures – a structure equivalent, in the limit, to the universe, packed somewhere within one thinking body; a structure that would, in other words, contradict the very principle of structural determination.

It was the impossibility of any structural constitution that led Descartes (on Ilyenkov's interpretation) to argue that thought instead belongs to a separate 'substance', viz. 'mind'. As is well known, Descartes could not explain how two things without anything essential in common, mind and matter, interact and accord with one another. So in the final analysis Descartes could not provide an account of mind and body any more rational than SEPM. He ultimately took refuge in 'God' to connect what cannot conceivably be connected. On Ilyenkov's interpretation it was Spinoza who first overcame rationally the contradiction of SEPM and of Cartesian dualism.

Spinoza by no means discards *in toto* the reasoning behind Descartes' system. This has the relevant implication that Spinoza develops the resolution of the problem of

scepticism contained in Descartes' philosophy. For Spinoza, as for Descartes, material structures constitute the universe, and the principle that is universally tied to structures rules out scepticism (in the terms set out above, it excludes the possibility of a 'time bomb' from material reality). Where Descartes had gone astray was in his conception of this common principle. Spinoza transcends Descartes' system fundamentally through recognising the true materialist principle constituting objects, a principle that encompasses thinking bodies.

Spinoza recognises that matter is not limited solely to the mechanistic principle recognised by Descartes. Rather, with greater structural complexity, the mechanistic form of motion is superseded. In other words the basic material principle that would today be described as *emergence* is recognised by Spinoza. However, this notion of emergence is not precisely the same as that of critical realism. Spinoza stresses that the totality of matter ('substance') constitutes the identity of all objects. The 'attributes' of this totality of matter are, for Spinoza, preserved and developed through all of its transformations. They thereby constitute universal laws of matter. As in the case of Descartes, elementary aspects of these laws are grasped (in a way to be outlined below) once any specific object is grasped and, as for Descartes, these aspects exclude any possibility of a 'time bomb'. For, this 'time bomb' is defined precisely as that which can completely change all laws, whereas the elementary attributes of the totality of matter are both known and eternally unchanging.

In effect, and in terms of the critique in chapter 3 above, Spinoza excludes a 'time bomb' from his philosophy. The presentation above demonstrates that Spinoza must provide an account of knowledge that is able to justify this exclusion. Furthermore this account must embrace the manifest phenomena of scientific practice and of human activity in general. Spinoza's articulation of both knowledge and practice arises out of a revolutionary account of thought and body as will be outlined below.

The fundamental breakthrough made by Spinoza lies in his re-conceptualisation of the relation between knowledge (thought), human practical activity and the material objects towards which that thought and activity are addressed. Instead of holding that thought *causes* intentional human activity (as does critical realism), Spinoza argues

that thought is *inseparable* from that activity. What is the nature of this inseparability? Well, to focus on the crucial feature of thought, viz. knowledge, or 'adequate' ideas, Spinoza holds that such ideas consist in awareness of the spatio-temporal form of the thinking body; in other words they consist in self-awareness. Self-awareness not of the inner structure and motion of the thinking body but of the outer movement of that body; self-awareness of the movement of the hands, arms, legs, head, etc., of the thinking body amongst the other bodies of the universe.

Bhaskar (*PON*, and elsewhere) notes, as must any enquirer into this issue, that thinking beings continually self-monitor their external activity; self-awareness being an emergent property of thinking bodies. What Bhaskar does not recognise, however, and what is not readily apparent to any enquirer into the issue, is the characterisation of adequate ideas as consisting in self-awareness of outer bodily activity. In particular an adequate idea of an object, on Spinoza's view, is nothing but self-awareness of the form of the thinking body, where that body is isomorphic to, i.e. in correspondence to, or moving in accordance with, the object. This is a subtle and strange twist, or reworking, of the relationship between knowledge, human activity and object on Spinoza's part. Intentional human activity is still associated with thought, inseparable from it, but not in terms of a causal relationship. Rather, the relationship is one of self-awareness; a different kind of inseparability to that entailed in a causal relationship.

The beauty of this conception is that it makes human practice vital to knowledge, inseparable from it, whilst being able to resist the sceptical consequences of the causal and non-isomorphic conception of critical realism. Thus the critical realist analysis of experiment can be re-conceptualised in terms of Spinoza's reworking of the relationship between knowledge, practical activity and object. On Spinoza's conception, practice is indeed necessary in order for the thinking body to achieve accordance with, or correspondence to, the objects that it comes into contact with. Through continual and fluid spatial activity, and through the revision of the schema of that activity in response to the reciprocal impact of the object of activity, the thinking body achieves spatio-temporal correspondence with the object. There is a 'mirroring' of the thinking body's activity with its object. The actions of the thinking body

correspond to, or map, the form of the object, such that the object is brought under the control of the thinking body. In an experiment, therefore, the object under study is isolated and its characteristic activity induced, at will, by the scientist, once the scientist has fathomed the requisite activity to yield this desired result. Technically speaking, the body achieves a (spatio-temporal) isomorphism, or identity (iso-) of shape (morph), with the object. *Simultaneously* as it does this, the thinking body achieves an adequate idea of the object, since such ideas consist in self-awareness of the isomorphism.

Thinking bodies are able to reflect and accordingly self-transform their inner bodily structure, hence their outer bodily activity, so as to act in accordance with, and comprehend, the material world. The development of human spatial activity within the objective material environment is simultaneously expressed for humans in the form of their ideas (their knowledge). Conversely, this practice is the objective, outer, expression of their developing knowledge. Crucially, knowledge is not determined (delimited) by the thinking body. Rather, knowledge is determined by the objects of thought. The thinking body must subordinate its will and consciousness to the dictates of the object, in ongoing material practice.³ In this way an adequate idea of an object is determined independently of the consciousness and will of the thinking body. Knowledge is guided, not by the thinking individual's consciousness and will, but by the material objects of practice, which forever serve to correct mistakes and to provide new puzzles, as actions run up against the palpable material barrier of objects, in unexpected ways. Thus Spinoza's philosophy cogently sustains the mind-independence of the objects of thought. The thinking body is progressively able to improve its grasp of these mind-independent objects, through ongoing practical engagement with them.

³ This statement is likely to strike a Marxist as neglectful of the transformative power of the subject (the labourer). See below for Ilyenkov's Marxist critique of Spinoza along just such lines. Crucially, the critique retains and develops the key features of Spinoza's conception, such that Marxist philosophy, on Ilyenkov's interpretation, cannot be grasped except as a fundamental development of Spinoza's conception, a development that retains Spinoza's notions of 'thought' and 'substance', and so resists Humean scepticism.

The 'time bomb', invoked in chapter 3 above that proved so damaging to critical realism, cannot exist because, by definition, it lacks the elementary and universal attributes of matter. These attributes are present (not 'absent', as in dialectical critical realism) in all objects, hence grasped by all thinking bodies (a grasp implicit in their ongoing activity, even if denied explicitly). However, it is one thing to have certainty regarding aspects common to all material objects, so ruling out the idle concoction of a 'time bomb', but it is quite another to grasp the specific developing forms of matter that constitute the specificity of objects encountered in everyday life. In other words, the knowledge that there is a developing and interconnected material universe, not a universe inhabited by 'time bombs', knowledge which is obvious to a small child (though not explicitly articulated by a small child), is hardly sufficient to grasp the specific material forms that constitute objects. It is in no way a *full* conception of matter. Such a full conception of the totality of matter ('substance'), hence of all possible specific objects that may be encountered in everyday life, is a far cry from the knowledge that humanity will ever possess. Only through ongoing practical engagement with the world is the partial knowledge that humans do possess developed further. Thus Spinoza refutes scepticism whilst upholding practice, through a materialistic reworking of the relation of thought, practice and object.

Development of the Relationship between Spinoza and Critical Realism

This section develops further, and in more detail, the nature of Spinoza's philosophy (as that philosophy is interpreted by Ilyenkov) and its relationship with critical realism. As noted above, the interpretation of Ilyenkov presented within this chapter is essentially different to other contemporary interpretations (Bakhurst, 1991; Chitty, 2000; Saad-Filho, 2002). None of the aforementioned interpretations so much as *mentions* Ilyenkov's revolutionary characterisation of an isomorphism between human bodily activity and the object of that activity.⁴ Nor do they highlight the central importance of Spinoza's philosophy to that of Ilyenkov; nor, finally, do they

⁴ Ilyenkov's argument that Spinoza's philosophy rests upon an isomorphism between human bodily activity and the object of that activity may well distinguish Ilyenkov's interpretation from what might crudely be termed the 'new Spinozist Marxism' (e.g. Negri, 1994; Balibar, 1994; Montag, 1998; 1999). Such an argument is absent, for example, from Montag (1999) and Balibar (1998). However, a separate study to this chapter would be required to explore this issue.

engage with Spinoza's notion of an 'all embracing totality' termed 'substance'. This is despite that fact that, for differing reasons, these interpretations of Ilyenkov's philosophy attempt to comprehend Ilyenkov's conception of mind and matter for which the above mentioned themes are indispensable on the interpretation of Ilyenkov offered within this chapter.⁵ For this reason numerous citations from Ilyenkov (1977; 1997) will be made backing up the interpretation offered and thereby establishing the case for a fundamental reworking of contemporary interpretations of Ilyenkov's philosophy.

Ilyenkov's exposition of Spinoza translates the salient features of Spinoza's philosophy into contemporary terminology:

Our job then cannot be once more to paraphrase the theoretical foundations on which Spinoza built his main work, the *Ethics*, and conclusions that he drew from them by means of his famous 'geometric modus'. In that case it would be more proper simply to copy out the text of the *Ethics* once again. Our job is to help the reader understand the 'real inner structure' of his system, which far from coincides with its formal exposition, i.e. to see the real 'cornerstone' of his reflections and to show what real conclusions were drawn from them, or could be drawn from them, that still preserve their full topicality. (Ilyenkov, 1977, pp.29–30)

The exposition below is an attempt to develop Ilyenkov's account and to present it in terms of critical realist notions such as that of 'stratification'. In this process of

⁵ Saad-Filho (2002, ch. 2) develops an interpretation of Ilyenkov's view of mind and matter in order to characterise contemporary new dialecticians as idealist. The argument below supports Saad-Filho's conclusions but not his interpretation of Ilyenkov's notion of mind (and hence of matter). Saad-Filho draws heavily upon Ilyenkov's early work (Ilyenkov, 1982) which was first published in the early 1960s, when Ilyenkov had not yet developed fully his interpretation of Spinoza. Chitty (2000) and Bakhurst (1991) engage directly with Ilyenkov's philosophy of mind. Chitty (2000) never once mentions Spinoza. Bakhurst (1991, pp.149–50, p.155, pp.250–1) recognises that Spinoza influenced Ilyenkov greatly but does not engage in any critical discussion of Spinoza or of Ilyenkov's interpretation of Spinoza. These scholarly contemporary works are very welcome exceptions to the general rule that Ilyenkov is little known amongst Anglo-American academics. The lack of any engagement with the themes highlighted in this chapter may reflect an implicit judgement – shared by Saad-Filho, Chitty and Bakhurst but disputed within this chapter – that Ilyenkov's arguments regarding these themes are weak.

translation it is possible that Spinoza's view is developed beyond Spinoza's own position but this is a minor price to pay if the content and critique below are of any merit at all.

The Universal Character of Thought

As outlined above 'thought' is, for Spinoza, a fully material mode of activity that accords with, in the limit, *all* objects in the universe. Though human thought is, of course, a very long way from reaching this limit and according adequately to the whole universe (it is 'imperfect' in Spinoza's terminology)⁶ it consists, nevertheless, in a continual striving towards this limit and embraces fluidly *any* object which it may come across. Thought has, then, a universal character or potential; a 'universalising' drive:

The proper, specific form of the activity of a thinking body consists ... in *universality*. (Ilyenkov, 1977, p.46)

This distinguishing feature of thought presupposes that the diverse objects of nature, according to which the thinking body acts, must have a universal and essential aspect. If it is true that the thinking body acts in accordance with any object, and also according to a unified schema, then all objects must have an underlying unity; a unity that is manifested, or exists, in their very diversity and plurality. For, it is only if objects have an essential unity that thought *as such* (thought as a single 'universalising' mode of activity as opposed to merely a set of different activities or a single, isolated mode of activity like any other) is possible at all. Notice that, without a universal aspect to objects, thought could not display the flexibility and fluidity that it does in fact display. The explanation of the structural constitution of thought as self-transforming would fail and Cartesian dualism would indeed be impossible to overcome. For, this explanation requires that the thinking body *moulds* or *transforms* its current mode of activity in order to accommodate new objects; the thinking body

⁶ 'The attribute of thought was ... only realised in him [real earthly man] in a very limited and 'imperfect' (finite) form [according to Spinoza]' (Ilyenkov, 1977, p.59).

does not 'start from scratch' every time a new object is encountered, rather it adapts the modes of activity that it has already learnt:

Its [the thinking body's] mode of action has a clearly expressed universal character, i.e. it is constantly being extended, embracing ever newer and newer things and forms of things, and actively and plastically adapting itself to them. (ibid., p.53)

The universal principles of thought can, then, be nothing but the reflections of the universal essence (called 'substance' by Spinoza) of the diverse objects of nature (the 'universe') (ibid., p.53).

This raises the following question: how are the manifestly diverse objects of the universe somehow united? The self-transformation of thought can only be understood to reflect nature if unity exists in nature; but does such unity exist and in what does it consist? Spinoza's answer to this question can be grasped by further development of his overcoming of the Humean critique of 'natural necessity' (a critique which, it was argued above, Bhaskar fails to overcome). It is to natural necessity, and a little known or understood basis for, and conception of, the notion of stratification that the argument below turns.

Natural Necessity

Critical realism makes the correct and profound observation that the objects of science are (stratified) structures and their corresponding modes of activity. Accordingly, critical realism goes on, apparently quite plausibly, to identify necessity (natural necessity) with each individual structure (and corresponding mode of activity), or more generally, with each stratum. Necessity, on this view, is comprehended once the underlying structure and mechanism is uncovered and defined. Yet, as argued in chapter 3 above, this conception is ultimately derailed in Humean fashion. For, to argue that necessity resides in a specific structure is to beg the question of how the structure itself arises; to fail, in fact, to show that the structure necessarily exists at all and to leave out of view any necessary development

further to its necessary process of formation. It is to leave the scientist as merely *describing* structures and modes of activity rather than *explaining* them; their necessary origins, development and demise.⁷ The critique above demonstrated, through the invocation of the 'time bomb' possibility, that the result of this lack of necessity turns out to be no knowledge of the immediate future and so no 'natural necessity' of the sort accessible to human knowledge at all.

But wherein can necessary existence be conferred on an object or strata? Can Hume be overcome? Critical realism recognises but fails to uphold the principle of 'structural mode of activity'. This is the principle that different respective material structures are tied to definite respective tendencies or propensities (in essence the principle of 'matter-in-motion'). Given this principle, then the greater the scope of extension in space and time that is taken into consideration, the greater is the likelihood of definite strata existing within that scope of extension. Given that matter is *infinite* in space and time, this suggests that definite strata must exist, with absolute necessity, not everywhere, nor for all periods of time, but somewhere, at sometime. Take, for example, the key issue of the existence of thought. Any given thinking body has, quite clearly, arisen from masses of chains of cause and effect that could equally have produced, say, a tree or a stone. Thus each thinking human being, indeed, the human species as a whole, has no *necessity* to arise; its origin was, in fact, determined step by step but this is just a chance occurrence that may just as well not have happened and need never happen again:

The individual body possessed thought only by virtue of chance or coincidence [on Spinoza's view]. The crossing and combination of masses of chains of cause and effect could lead in one case to the appearance of a thinking body and in another case simply to a body, a stone, a tree, etc. So

⁷ For example, 'to explain the event we call "thinking", to disclose its effective *cause*, it is necessary to include it in the chain of events *within which it arises of necessity and not fortuitously*. The "beginnings" and "ends" of this chain are clearly not located within the thinking body at all, but far outside it ... The explanation must consequently ... include those relations of cause and effect that of necessity generate our own physical organisation capable (unlike a stone) of thinking.' (ibid., pp.37–8).

that the individual body, even the human body, did not possess thought [with] one whit of necessity. (ibid., pp.53–4)

However, though it is true that any particular person, or indeed human thought in general, does not of necessity arise, it would seem reasonable to assume that thought as such, rather than the specific form of human thought, *is* necessarily produced by the *infinite* real totality:

Spinoza ... defined thought as an *attribute of substance*, and not as its *modus*, not as a partial case. Thus he affirmed, in the language of his day, that the single system, within which thought was found of necessity and not fortuitously (which it may or may not be), was not a single body or even as wide a range of bodies as you wished, but only and solely *nature as a whole*. (ibid. p.53)

It is not necessary, given the complexity of thought, that thinking bodies take the precise form (structural constitution) of humanity,⁸ but it is necessary that, through some or other structural constitution, a thinking body – a body capable of reflection to the same or to a greater degree than humans – will occur. Thus necessity, absolute necessity, resides in the fact that space and time are *infinite*. Formally, and conceptually, the probability of strata existing somewhere, at sometime, in the infinite universe is, precisely, one. This is because probability is properly defined as a (mathematical) *limit* as a number of ‘trials’ or ‘experiments’ approaches infinity. For this reason, ‘real infinite nature’ is the notion upon which Spinoza’s concept of necessity hinges:

[O]nly Nature as a whole, understood as an infinite whole in space and time, *generating* its own partial forms from itself, possesses at any moment of time, though not at any point of space, *all the wealth of its attributes*, i.e. those

⁸ ‘Spinoza said more than once that it was impermissible to represent *thought as an attribute* in the image and likeness of *human thought* ... To represent thought in general in the image and likeness of existing human thought, of its *modus*, or ‘particular case’, meant simply to represent it incorrectly’ (ibid., p.57).

properties that are reproduced of necessity and not by chance, miraculous coincidence that might just as well not have happened. (ibid. pp.54–55)⁹

Spinoza calls this all embracing totality ‘substance’ or ‘God’ and the finite things within it, ‘forms of matter’ (see below).

The Relationship Between Strata

Spinoza’s recognition of ‘substance’ entails a different concept of the relationship that holds between different strata to that of critical realism. In contrast to the critical realist view, strata are unambiguously (and symmetrically) internally related; they are necessary developments or transformations of one another. A higher stratum is a necessary development of a lower stratum. A lower stratum necessarily develops into a higher stratum. Though it is quite clearly not necessary that a lower stratum should always and everywhere develop the structures at the higher stratum, it is absolutely necessary that somewhere, sometime, in the infinity of the universe, a lower stratum will develop to form the higher stratum. So, taking three broad ranges of strata, it can be said that the structures and modes of behaviour of inanimate bodies will necessarily, somewhere, sometime, develop into the structure and modes of behaviour of living bodies; furthermore, these emergent bodies – their structures and modes of behaviour – will necessarily develop into thinking bodies; not everywhere but somewhere at some time:

[W]ith the same iron necessity that it [matter] will exterminate on earth its highest creation, the thinking mind, it must somewhere else and at another time again produce it. (Engels, 1940, p.25, cited in Ilyenkov, op. cit., p.55)

With Spinoza, as with critical realism, there is a clear distinction of real structures, together with their characteristic modes of behaviour (mechanisms), from any actual

⁹ Similarly: ‘[o]nly nature as a whole was that system which possessed all its perfections, including thought, of absolute necessity, although it did not realise this perfection in any single body and at any moment of time, or in any of its “modi”.’ (ibid, p.54).

and conjuncturally determined object or event. In turn, there is a clear distinction of actual events from their observation by humans. The chasm between critical realism and Spinoza's conception lies in their distinct respective views of natural necessity and the corresponding understanding of stratification. Critical realism and dialectical critical realism stress 'multiple essences', 'anti-foundationalism', 'open', 'incomplete', 'partial' and 'subordinate' totalities, and stress difference over unity (see chapter 3 above). All this is counterposed by Bhaskar to Hegel's alleged closure and over emphasis on unity. Yet Bhaskar's position collapses to Humean scepticism (if the critique above is accepted). Moreover this collapse occurs, it can now be seen, just *because* of the failure to recognise one single infinite reality of matter i.e. to recognise what Spinoza calls 'substance'. If, somehow, space and time are *finite* (which, in fact, is inconceivable), or if reality has no necessary strata despite being infinite in space and time, or if just any 'possible world' / 'partial totality' is possible, then there can be no basis to argue against the possibility of a 'time bomb'. As argued in chapter 3 above, such a 'time bomb' entails fundamental uncertainty regarding the nature of things, i.e. Humean scepticism. So the failure to uphold knowledge of absolute necessity does not simply lead to some sort of 'nagging doubt'. Rather it leads to fundamental uncertainty i.e. it entails the very *opposite* of knowledge of absolute necessity. Hence with every word of his critique of the notion of all encompassing totality, Bhaskar simply hammers another nail into the coffin of (his notion of) natural necessity and so (his attempt to sustain) rationality:

Only by proceeding from the idea of substance could the thinking body understand both itself and the reality with and within which it operated and about which it thought; any other way it could not understand either the one or the other and was forced to resort to the idea of an outside power, a theologically interpreted 'God', to a miracle. (ibid., p.60)

Spinoza's notion of stratification overcomes both Humean scepticism and Bhaskar's (in any case self-contradictory) critique of the notion of an all-encompassing unity. Just as Bhaskar recognises that objects and events are contingent conjunctures of strata, so does Spinoza. Only, Spinoza is able to sustain his philosophy without

collapsing to Humean scepticism because, unlike Bhaskar, he recognises that strata are necessary developments of one another and, as such, eternal potentia (attributes) of a single unified totality (substance):

[According to Spinoza] substance, i.e. the universal world matter, did not possess just the single attribute of 'being extended' but also possessed many other attributes as inalienable from it (inseparable from it though separable from any finite body). (ibid. p.56)

Any object is a contingent conjuncture of necessarily related strata and, as such, must be comprehended as a 'specific form of matter'. As 'matter' objects are identical, united; as *specific forms* of matter they are different. Unity and difference are inseparably bound up in any object such that unity and difference require *equal* emphasis in contradistinction to dialectical critical realism: any object is, then, precisely a 'unity of unity and difference':

Individual bodies of the same nature ... are as real as the unity (identity) of their 'nature' expressed by the definition in the 'attribute of thought' and by real diversity in the 'attribute of extension'. *Variety and plurality* are clearly understood here as *modes of realisation* of their own opposition, i.e. of the *identity and unity of their 'nature'*. (ibid. pp.62)¹⁰

What does the above imply for the dialectical critical realist notion of 'absence'? It has been argued above that, unlike dialectical critical realism, Spinoza understands objects, and their concepts, as having an implicit aspect of unity, as being internally related to the real infinite totality. Thus the infinite totality is *not* completely absent from a given stratum. Neither the critical realist view that a stratum can be grasped in

¹⁰ Similarly: 'For him [Spinoza] the "general", "identical", "united" were by no means illusions created by our speech ... but primarily the real general nature of things' (ibid. p.64); 'For Spinoza "relations and plurality" were not "illusory" (as Russell described them) and "identity and unity" were not illusions created by the "subject-predicate structure" (as Russell himself thought). Both the one and the other were wholly real, and both existed in "God", i.e. *in the very nature of things*, quite irrespective of whatever the verbal structures of the so-called "language of science" were' (ibid. p.65).

isolation from the stratum below nor the alternative view that the existence of one stratum must everywhere imply the existence of the emergent stratum (as the existence of a landlord must everywhere imply the existence of a tenant), is entailed in Spinoza's conception. Spinoza recognises that a lower stratum can exist without developing into a higher stratum as does Bhaskar but, unlike Bhaskar, Spinoza also recognises that the lower stratum must develop into the higher stratum somewhere, at sometime. In this sense, the higher stratum is implicit in the lower stratum, both conceptually and in reality. Thus strata are always *inherent potentia* of the present; they are implicit in the present and not absent from it. The dialectical critical realist notion of real absence would destroy the crucial features of Spinoza's view, the implicit and eternal *presence* of all attributes of substance (strata):

Matter remains eternally the same in all its transformations, ... none of its attributes can ever be lost. (Engels, 1940, p.25, cited in Ilyenkov, op. cit., p.55)

Epistemology

Spinoza's epistemology can usefully be presented in terms of the 'litmus test' for philosophy proposed by critical realism. From *RTS* onwards, Bhaskar and many other critical realists have staked the worth of their view on its ability to sustain an intelligible conception of science (Lawson, 1997, provides a particularly clear statement to this effect). The challenge for alternative views has always been to better the critical realist conception of the ontology presupposed by scientific practice (an ontology that Bhaskar claims in *Dialectic* to be presupposed by any human act whatsoever). And, while modestly holding out the possibility, indeed likelihood, that critical realism may one day be superseded, critical realists remain convinced that at least 'something like' the basic critical realist stratified ontology must be true, given the nature of scientific practice. If the foregoing shows the critical realist ontology to be untenable so failing the 'litmus test', and that Spinoza's philosophy is on an altogether higher level, then it still remains to be demonstrated that Spinoza can pass

the 'litmus test' and uphold scientific practice. This demonstration is carried out below.

As detailed in chapter 3 above, critical realism conceives of scientific progress in terms of the process of 'retroduction'. Scientists 'borrow' models from established fields elsewhere and 'stretch', 'distanciate' or distort their meaning in order to produce 'hypotheses' of fundamentally new strata to be empirically tested. Spinoza's conception does not deny that a process such as retroduction is highly evident in science and that analogy, metaphor, etc., is a ubiquitous scientific phenomenon. The success of critical realism lies in part, no doubt, on its detailed description of these surface features of science. However, the notion of dialectical logic opened up by Spinoza's view is most emphatically not merely a 'logic of analogy and metaphor'; it is a mistake to view scientists as being led by such a logic – however they themselves understand their activities (as Bhaskar often points out, the best of scientists often misconstrue the methodology implicit in their own work). Dialectical logic penetrates beneath these surface features of science in order to provide a relatively unknown yet challenging comprehension of epistemology and so of scientific practice.

The isomorphism of thought and object upheld by Spinoza means that knowledge is not reliant on (tested against) the effects of objects *where those effects are non-isomorphic to their cause*. On the contrary, even before scientific practice begins, the scientist has learnt to act in accordance with a great many objects (actions 'mirroring', or 'isomorphic to', objects); her ideas are thereby inner expressions of an isomorphism of human spatial bodily activity with the activity of a great many objects:

[A]n adequate idea is only the conscious state of our body *identical in form with the thing outside the body*. This can be represented quite clearly. When I describe a circle with my hand on a piece of paper (in real space), my body, according to Spinoza, comes into a state fully identical with the form of the circle outside my body, into a state of real *action* in the form of a circle. My body (my hand) really describes a circle, and the awareness of this state (i.e.

of the form of my own action in the form of the thing) is also the idea, which is, moreover, 'adequate'. (ibid. p.69)

And through the practical activity of science, practical intervention to trigger mechanisms (to create closure), the scientist learns to further develop their mode of activity to accord with the specialised objects of science (strata):

[T]he more individual things our activity embraces and the deeper and more comprehensively we determine our body to act along the shape of the external bodies themselves, and the more we become an active component in the endless chain of causal relations of the natural whole, the greater is the extent to which the power of our thinking is increased, and the less there is of the 'specific constitution' of our body and brain mixed into the 'ideas' making them 'vague and inadequate' (ideas of the imagination and not of the 'intellect'). The more active our body is, the more universal it is, the less it introduces 'from itself', and the more purely it discloses the real nature of things. And the more passive it is, the more the constitution and arrangement of the organs within it (brain, nervous system, sense organs, etc.) affect ideas. (ibid., p.72)

In Spinoza's terms, 'he who possesses a body fit for many things possesses a mind of which the greater part is eternal' (Spinoza, 1952, p.357, cited in Ilyenkov, op. cit., p.72).

Furthermore the ontology outlined above demonstrates that strata are unambiguously internally related to one another, and to strata yet to be discovered by science. Specifically, known or unknown strata are necessary developments of one another. A higher stratum is a necessary development of a lower stratum. A lower stratum necessarily develops into a higher stratum. Thus the *fundamental* task for the scientist is *not* to take old knowledge, externally related to unknown strata, and stretch, distort or 'distanciate' its meaning to reach a new, externally related model or hypothesis. Rather, the task is to *interconnect* the given strata, to fathom their

relation in a hierarchy of *necessary development*. Only within such a hierarchy can either the unity or the difference of any stratum be grasped.

Of course, only a small portion of the universe is open to scrutiny by humans so that that the process of fathoming interconnection in terms of necessary development must entail an attempt at comprehension that (however imperfectly) goes way beyond the actually encountered strata; an attempt to achieve knowledge of what is common to all strata. From this follows the Spinozist understanding of the nature of human error; the manifest and high degree of 'imperfection' of finite, human thought as Spinoza puts it. Error does not lie fundamentally in a failed analogy, with respect to effects non-isomorphic to their cause. That is to say, error does not lie in a lack of objectivity. This is because concepts are isomorphic to their object and therefore quite objective. Instead, error lies in a lack of *interconnection*, a lack of recognition of the true necessary development of strata, rooted in a failure to grasp the truly universal aspects of given objects (and their concepts) and a corresponding *over-extension* of partial truths:

Error ... only began when a mode of action that was limitedly true was given universal significance, when the relative was taken for the absolute. (ibid. p.58)

Error is, then, an elevation of a merely contingent object (aspect) into a universal attribute of substance (a universal truth). On this view, all concepts are true (isomorphic) to their object – the crucial question concerns just what the object (or aspect) is – is it a truly universal aspect or merely a contingent occurrence?

The erring man also acted in strict accordance with a thing's form, but the question was what the thing was. If it were 'trivial', 'imperfect' in itself, i.e. fortuitous, the mode of action adapted to it would also be imperfect. And if a person transferred this mode of action to another thing, he would slip up. (ibid., p.58)

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Of vital importance, and in contrast to critical realism (and other well known philosophies) is Spinoza's recognition that objects do have a universal aspect, and that this aspect consists in their being a specific form and conjunction of strata (form of matter), where strata constitute a single hierarchy of necessary development. Thus the task to fathom this universal aspect, hence the aspect of difference also, is a difficult but not impossible task. It follows that the fundamental advances in science entail a reworking, or reconstruction, of the necessary development of given concepts according to a principle that had previously remained implicit but had not been explicitly comprehended. To illustrate this view, consider the 'time bomb' scenario, shown above to be so damaging to critical realism. For Spinoza, such a scenario is easy to dismiss because, quite simply, the invocation of a 'time bomb' – an entity or force that will at some future date abolish the laws of nature – is an invocation of something that is *not an intrinsic development of current knowledge or currently encountered (known) strata*. Unlike the critical realist view, the scientist is not at liberty to concoct just whatever notion of new strata that the scientist pleases; still less to concoct a self-contradictory notion of a time bomb; rather, the task is to fathom the inner connection of phenomena more and more deeply and adequately. As more and more objects are embraced by thought (so spatial body activity), then a more and more deep and adequate grasp of the inner development of things is achieved (see *ibid.*, p.72, cited above). 'Jumps' of thought are *intrinsic developments* of 'old' knowledge to reveal new strata, new laws etc. The development of knowledge is, in this sense, 'linear' in contradistinction to the critical realist view.

It is worth referring back to what created the whole difficulty for critical realism regarding the notion of a 'time bomb' and the resulting collapse to scepticism: the conception of the relation of thought and being. It was shown above that critical realism is absolutely precluded from ruling out a 'time bomb' structure due to the non-isomorphism of thought and object (non-identity of thought and being) generated by SEPM. Yet, no self-contradiction is entailed in ruling out a 'time bomb' given the isomorphism of thought and object upheld by Spinoza's reworking of SEPM. From this flows the more general point that, at the heart of any philosophy, must lie some conception of the relation of thought and being, and an argument that

only a materialist theory of the identity-in-opposition of thought and being is, ultimately, rational.

Illustration

The move which can loosely be referred to as a development from a 'Newtonian' to an 'Einsteinian' conception of the universe appears to provide an illustration of the above themes.¹¹ Most obviously, the view of error is illustrated, firstly, on a quantitative basis, by the approximation to a 'Newtonian' world by Einstein's equations at a limited range of magnitudes of relevant variables. The Newtonian world view thus incorrectly takes a limited, partial truth (an equation that is approximately true within a given range of magnitudes) as holding universally (as holding outside the given range of magnitudes). On a qualitative basis, it is also clear that Newton's notions of absolute space and time, and so the law that a body remains at rest or in constant motion unless acted upon by an external force, has no place in Spinoza's conception. Again, Newton reflects how the world partially appears, rather than its truly infinite nature (of course, Spinoza and Einstein were very far from being the first to argue this case against absolute time and space). Even more significantly, Einstein is led to supersede Newton's notion of the 'force' of 'gravity'. The notion of this force as existing externally to matter and being causal upon it (a notion that has more than once been used to criticise Spinoza's view)¹² is superseded by the view that gravity is no more than a reflection of the curvature of space-time. For Spinoza, the notion of 'force' must refer to a mode of activity of matter and cannot be considered as existing externally to matter. To label a recognised mode of activity as 'caused by' an external 'force' is not to explain that activity at all. Rather, as argued above, explanation lies in *interconnecting* the structures and modes of activity of nature, revealing their inner development and unity. From this perspective, the development within the physical sciences towards a *unification* of the recognised physical 'forces' into one single force is unsurprising.

¹¹ Ilyenkov does not use this illustration and I am not a natural scientist, let alone an expert on Einstein, hence the illustration is best viewed as an attempt to make clear the interpretation of Spinoza's philosophy, rather than a true account of either Newton or Einstein.

¹² Bhaskar himself makes just such a criticism of Spinoza. See *PON*, chapter 3, pp.103–4.

Spinoza, Hegel and Marx

The presentation of Spinoza's position above, as that position is interpreted by Ilyenkov, is remarkable in that Spinoza's work appears as the fundamental basis for materialist dialectics; a view of Spinoza that is little recognised. At least two questions are raised by this presentation. Firstly Spinoza's view has been presented in a purely positive light yet Hegel and Marx are much more than mere Spinozists, hence the question of where they find fault with Spinoza. Secondly if Spinoza does indeed provide the basis for materialist dialectics then his view should speak to the vexed question of the nature of the Marx / Hegel connection. In answer to these questions it should be made clear that Spinoza's view can provide only the most abstract facet of philosophy, it being left to Hegel, Marx and Engels to elaborate dialectics. Furthermore both the Hegelian and Marxian dialectic does contain, on Ilyenkov's interpretation, a profound development of Spinoza's position that reveals its great limitations at anything but the most abstract of levels. Hegel's critique of Spinoza is summarised by Smith (1993) and need not be presented below. Instead, Marx's (related) critique is presented. Given this context, an argument is put forward that Spinoza's quite correct conception of substance at an abstract level, despite its failings at more concrete levels, sheds new light (relative to the still ongoing debate) on the sense in which Marx legitimately accuses Hegel of idealism.

Marx's Development from Substance to Labour

Marx, on Ilyenkov's interpretation, goes beyond Spinoza by noting that the mode of human activity is not merely one of accordance with the object; humans transform not only themselves but also the object in the course of their labour i.e. in the process of social production. According to Marx's view, the social individual varies according to a historical process, labour, where that individual is equally as important as the totality (which Spinoza had termed 'substance') of which the individual is part. On Marx's conception, it is through labour that nature (substance) transforms itself, given that humans are as much part of nature as are the objects of their labour:

According to him [Marx], only nature of necessity thinks, nature that has achieved the stage of man socially producing his own life, nature changing and knowing itself in the person of man or of some other creature like him in this respect, universally altering nature, both outside him and his own. A body of smaller scale and less 'structural complexity' will not think. Labour is the process of changing nature by the action of social man, and is the 'subject' to which thought belongs as 'predicate'. But nature, the universal matter of nature, is also its substance. Substance, having become the subject of all its changes in man, the cause of itself (*cuius sui*). (ibid., p.74)

The exposition of Spinoza remains very important because it reveals clearly the true significance of Marx's well-known remarks on labour and nature. Most importantly, it reveals that the notion of labour incorporates an isomorphism of thought (the mode of activity of thinking beings) and the object of thought. Note that critical realism is also able to uphold a notion of labour, or 'social production', through the so-called 'transformational model of social activity'. Yet the critical realist notion is fundamentally different to that of Ilyenkov since it is based on SEPM (so on a non-isomorphism of thought and the object of thought).

The Marx-Hegel Connection

The precise relation of Marx and Hegel has been a perennial source of debate within Marxism. The debate shows no signs of letting up. To take an important recent example, Rosenthal (1998) provides a vehemently anti-Hegelian reading of Marx, including an attack of current trend towards a 'new dialectical' reading of Marx and Hegel. Various 'new dialecticians' have responded strongly to Rosenthal (Williams, 2000; Smith, 2000a; Arthur, 1999). Within this debate the range of interpretations of Hegel are spread from outright and mistaken idealism (Rosenthal) to basic and correct materialism (Smith, 1999; see also Fraser, 1998). It can also be noted that *none* of the prevailing interpretations actually sustains Marx's own well-known statements to the effect that Hegel must be 'turned right side up' so as to reveal the 'rational kernel' in the 'mystical shell' of the Hegelian dialectic (Bhaskar too denies

the metaphor of inversion). What, then, does the above interpretation of Spinoza contribute to the debate? Firstly the interpretation defends Hegel, as well as Marx, *against* the charge of idealism on a great many counts. For it shows, as argued above, that there is nothing idealist or 'anthropomorphic' about a linear dialectic and related themes (*contra* Rosenthal and Bhaskar). Indeed Ilyenkov's interpretation is congruent with the cogent defence of Hegel against such criticisms made by Tony Smith and others (see Ilyenkov's very similar, though little known, interpretation and defence of Hegel made in Ilyenkov, 1977, Essay 5). Secondly the interpretation reveals a sense in which Hegel *is* an idealist and must be turned 'right side up' just as Marx recommends; this is discussed below.

The basic point made against Hegel by Ilyenkov, a point which holds against even the most robust of defenders of Hegel such as Tony Smith and Ian Fraser,¹³ is that Hegel does not make fully explicit the *materialist* identity theory worked out by Spinoza. To be specific, Hegel is ultimately *silent* on the precise specification of the mind / body relationship and so on the emergence of thought from matter. In consequence and despite the great gains of the Hegelian dialectic, Hegel is, in the last instance, idealist, because he cannot specify the *origin* of thought in matter. Hence, for Hegel, 'thought', not labour, determines human activity:

In reality man thinks because that is his real life activity. Hegel said the contrary, that real human life activity was such because man thought in accordance with a definite schema. All determinations of human life activity ... appeared as the *result of thought*. (ibid., 233)

Hence the isomorphism of human activity with objects cannot be interpreted as a *material* identity of subject and object, for it does not have its origin in the activity of matter:

¹³ The question of whether Ilyenkov's critique of Hegel is a valid critique of Hegel himself, and not just of his 'new dialectical' interpreters, is far beyond the scope of this chapter, and the thesis overall. This chapter does not affirm any interpretation of Hegel; it does not address the question of whether Ilyenkov, Bhaskar, or the 'new dialecticians' have the 'correct' interpretation.

Thought was thus transformed [within Hegel's field of view] into the only active and creative force, and the external world into its field of application. Naturally, if the sensuously objective activity (practice) of social man was represented *as the consequence*, as the *external objectification of ideas*, plans, and concepts created by thought (i.e. by persons occupied in mental work), it became in principle impossible to say either what was the source of thought in the head of theoreticians or how it arose. (ibid., p.237)

For this reason, according to Ilyenkov, ideas ultimately dominate matter in Hegel's philosophy (note that this is intrinsic to Hegel's philosophy and not simply a mistaken application of that philosophy as in Tony Smith's interpretation):

He [Hegel] *idolised* the logical forms and laws of human thought, i.e. declared them absolute, without even allowing the problem of their *origin* to be posed. (Ilyenkov, op. cit., p.238).

Thus, for Marx, it is necessary to retain the Hegelian dialectic but turn it right side up by basing it on a materialist rather than idealist identity (in opposition) of subject and object. This means stripping the Hegelian dialectic of all the idealist tendencies it inherits from the idealist identity theory upon which it is based. The chapters below attempt, amongst other things, to contribute towards this task by recasting contemporary and Hegel inspired systematic dialectics on the basis of Ilyenkov's materialist dialectics.

Conclusion

The key argument of this chapter drawn, for the most part, from Ilyenkov's interpretation of Spinoza, can be summarised succinctly. Building his philosophy upon the sharp distinction between thought and its object, Bhaskar claims to offer a 'third way': he condemns any 'fundamentalist' notion of a single essence, or totality, underlying all phenomena, for its alleged blotting out of difference, and he condemns the anti-essentialism of empiricism for its failure to comprehend the real world of 'multiple essences'. Yet (i) the non-identity of thought and object leads his 'third

way' to collapse into the empiricism of Berkeley and Hume; (ii) Spinoza's notion of an all-encompassing substance overcomes empiricism whilst giving equal emphasis to unity and difference, based upon a materialist identity-in-opposition of thought and being. There is, in other words, no 'third way' but, instead, as Ilyenkov puts it:

two polar and mutually exclusive solutions of one and the same problem – the problem of the relation of 'the world in consciousness' ... to the 'world outside consciousness' ... For here a choice must be made: either nature, including man as part of it, must be understood through the logic of the 'concept of substance', or it must be interpreted as a complex of one's sensations. (Ilyenkov, 1977, p.66)

The lessons of Ilyenkov's argument, on the interpretation of the argument offered above in contrast to other contemporary interpretations (Bakhurst, 1991; Chitty, 2000; Saad-Filho, 2002), are twofold. Firstly the argument suggests that scepticism is a harder nut to crack than either critical realism and its development into dialectical critical realism or contemporary Hegelian Marxist thought recognises. To point out the self-contradictory nature of scepticism, as does Bhaskar, is, of course, easy. Hume never once claimed to overcome the self-contradictory nature of his philosophy. *Just because of this* Hume relegated 'reason' to a secondary role in human affairs and held that custom, habit and the passions hold ultimate sway over human thought and action (Brown, 2001; Dow, 1999). From Ilyenkov's perspective, it does not appear that Hume would have had great difficulty in refuting either Bhaskar or contemporary Hegelian Marxists. Critical realism cannot overcome the non-isomorphism of idea and object at its very heart. Hegelian Marxism cannot *justify* an identity of thought and being. In neither case is a rational warrant provided for rationality itself, i.e. self-contradiction is not, finally, overcome. The paramount importance of Spinoza's notion of substance (as interpreted by Ilyenkov) and related notions lies, it has been argued, in the upholding of a materialist identity-in-opposition of thought and being and, hence, of rationality itself.

Secondly the argument suggests that it is impossible to understate the philosophical damage wrought by (i) the so called 'dialectical materialism' of Stalinist orthodoxy; (ii) those who can see only Stalinist orthodox philosophy, or some equal crudity, as soon as the term 'dialectical materialism' is invoked (and the term is very little invoked in contemporary Western academia). Criticisms along the lines of 'the idealism of matter'; the conflation of intension and extension; technological determinism; reification of universals or of some mystical 'absolute'; the dismissal of any form of teleology; and many other such criticisms do not remotely grasp the arguments above. If Ilyenkov's argument is to be promoted and developed, then it is vital that the argument receives genuine criticism. Accordingly the ultimate aim of this chapter is to foster debate regarding the nature, significance and potential for further development of Ilyenkov's philosophy; a philosophy that is admittedly difficult but also rewarding and, it has been argued, robust.

Chapter 5. Developing Realistic Methodology: How Systematic Dialectics Surpasses the Critical Realist Method for Social Science

Introduction

This chapter draws upon the philosophical critique of the previous chapters in order to develop a methodological critique of critical realism. The negative aspect of the critique is presented in the first section. In the second section of the chapter, the method of 'systematic dialectics' (a specific branch of 'new dialectics') is presented as a superior alternative to the critical realist method, despite the Hegelian shortcomings of systematic dialectics. This second section of the chapter stresses the positive features of contemporary and Hegel inspired systematic dialectics. Subsequent chapters draw out the idealist limitations of this method and recast the method on Ilyenkov's materialist basis (see chapter 4 above), in the specific context of the theory of value and capital.

Immanent Critique of the Critical Realist Method

The backdrop to the critique below is Bhaskar's own critique of orthodox philosophy. Bhaskar argues that orthodoxy fails to sustain the distinction between ontology and epistemology. The critique below – if it is accepted – demonstrates that Bhaskar and critical realism has gone too far in the opposite direction. Critical realism neglects the *intrinsic links* between ontology and epistemology due in large part to its account of the relation between thought and the objects of thought. When these links are examined then it becomes clear that the method of critical realism cannot sustain the critical realist social ontology.¹ Firstly the critical realist method for social science is shown to preclude any theoretical anticipation of novel change despite its extreme generality (it is compatible with many specific methods). Secondly the restrictive nature of the method is suggested to follow from the 'non-isomorphic' and causal

¹ To state the same thing in critical realist terms (from *Dialectic*, p.107 and p.204; see also *PON*, ch. 1): the critical realist 'philosophical ontology' is fundamentally at odds with the 'scientific ontology' to which the critical realist method necessarily gives rise.

error been made that is inessential and so remedied easily or is something fundamental at stake? The characterisation of critical realism made in previous chapters suggest that the reasons lie at the very foundations of critical realism, and will be summarised below.

Non-Isomorphism of Thought and its Object

The previous chapters have attempted to establish the following relevant propositions. 'Critical realism' was born as a specific form of 'scientific realism' which asserts independence of the objects of science from scientific practice. Furthermore the philosophical term 'realism' applies, more broadly still, to any view that asserts some significant degree of mind-independence of things (see chapter 2 above). Once the obvious distinction is made the question arises as to the precise relation between a real object and its concept. It was emphasised above (chapter 3) that Bhaskar insists that object and concept are entirely different. He states precisely that thought is never 'isomorphic' to the objects of thought nor indeed does it resemble them in any way (*RTS*, p.249; *SRHE*, pp.50–56; see also *Dialectic's* sustained polemic against subject-object identity theory). As noted in chapter 3 above, the term 'isomorphism' ('iso' = same; 'morph' = shape) can be taken broadly to refer to a situation where relata have some essential feature in common; without any such feature there is no essential link, and so no rationally discernible connection or 'mapping' between them. The non-isomorphism is underlined by Bhaskar's emergence theory of the mind-body relation, dubbed 'synchronic emergent powers materialism' (SEPM), whereby thought is a power, *sui generis*, that emerges from the complex structure of (parts of) the body (*PON*, ch. 3), a structure that may be termed 'mind'. His theory entails that the relation of thought and object is causal; specifically, that reasons cause intentional human activities. Chapter 3, above, argued that SEPM can be considered to be the 'conceptual essence' of critical realism.

Inability to Theorise Structural Transformation

It can now be seen just why transcendental deduction is advocated. Despite the apparently close relation of a social form to its underlying social structure the case

remains that the social form as a concept, and the social structure as a real object generating the form, are, like all concepts and objects, in a *non-isomorphic* relation according to the most basic and general premise of critical realism. The immediate and inevitably corollary must be that there can be no rationally discernible connection or 'mapping' between social form and social structure. It is vital to note that thought and object are utterly different in principle. So there can be no recourse to the view that they have *some* rationally discernible connection, however weak. This is the force of the term 'non-isomorphism'. Now, in the absence of any rationally discernible link, the form that serves as premise can tell the scientist one thing and one thing only: *some* underlying structure has produced it. It cannot reveal just what this structure is nor can it provide any further structural information. Therefore the given form does not provide any clue as to what novel forms and structural developments are likely to occur and the scientist, given the premise of the form only, is forced to hypothesise static structures that generate the form and only the form.

Consider, by way of analogy, a familiar case of structural transformation in biological science, the process whereby a chicken's egg transforms into a chicken. The position faced by the critical realist social scientist is analogous to that of a biologist observing the egg but unable to examine its inner structure or to observe the transformation of the egg into a chicken. In such circumstances it will be difficult enough for the scientist to hypothesise a structure and mechanisms compatible with the 'egg form'. It would be sheer fantasy for the scientist to hypothesise a structure capable of immanent transformation into a chicken; any such posited structure must arise from outside the transcendental premise of the 'egg form' – it cannot be transcendently deduced. This ensures that transcendental deduction must seriously misrepresent its object by wrongly attributing stasis to it. Any attempt to include self-change is a matter for speculation and not social science so hypothesised structures will be unduly static in opposition to the transformational social ontology.

It is true that the transformational model of social activity seemingly implies a closer link between structure and form than that between, in the analogy, the 'egg form' and its underlying structure and mechanisms. Unlike the biologist, the social scientist knows that her premises (social forms) are, as Bhaskar puts it at one stage, '*...not*

externally related and contingently conjoined to what happens in the human sphere, but internally related to and [partly] constitutive of it' (*SRHE*, pp.160–61; emphasis in original). However, the analogy between egg shell (form) and its contents (structure) is precise in the crucial respect of their non-isomorphic relation. So to deny it would be, quite simply, to deny the fundamental premise of critical realism.

The analogy also denies the scientist direct empirical observation of the egg's transformation into a chicken. This denial would be arbitrary if the example was being considered for its own sake or, indeed, if an analogy was being made with some other non-social structure. But the example is here being used by way of analogy with social structures. The reproduction and transformation of social structures constitutes human history. A distinctive feature of this history is that it is unidirectional; human history does not repeat itself in the manner of the continual cycle of chicken and egg. This is precisely a feature that the 'transformational model of social activity' is supposed to incorporate. At any point in time there are a unique set of forms and structures whose evolution will be correspondingly unique. Therefore reference to past forms and structures will not overcome the problem, in the way that reference to past chickens is possible in the analogy of chicken and egg.

Significantly, in his account of natural science, Bhaskar recognises structural stasis as the corollary of concept / object non-isomorphism – thus he writes 'changes in things, I have argued, are explained in terms of unchanging things' (*RTS*, p.208). It is in his *social* ontology that Bhaskar first introduces transformation of underlying structures. He accepts the *ontological* point that social structures transform but does not recognise the *methodological* contradiction elaborated above.³

The above considerations lead to an apparent terminological inversion by critical realism which, once corrected for, will allow the contradiction between the critical realist social ontology and method to be stated in formal terms below. Prior to this

³ This indicates, once more, that Bhaskar's philosophy collapses in the face of the problem of theorising change. It was noted in chapter 3 above that dialectical critical realism attempts to face up to this problem and in chapter 4 that this attempt fails. In this chapter the method, as opposed to the philosophy, of critical realism is shown to suffer from the same essential flaw. The method of dialectical critical realism is considered explicitly below.

statement, two points can be noted. Firstly the discussion above explains key features of transcendental deduction (this explanation for transcendental deduction was elaborated upon in previous chapters). In the absence of an isomorphism of form and underlying structure how can hypotheses be generated? By analogy and metaphor; the adaptation of models and concepts 'borrowed' from existing theories. Given this same absence, how can the relative merits of competing hypotheses be appraised? By empirical test – in the social sciences mainly tests of explanatory power. Secondly a corollary of the argument above is that 'transcendental deduction' is highly counter-intuitive, entailing, as it does, the implausible view that there is no discernible link between a social form such as 'exchange value' and underlying social structure such as private production for exchange. Once the argument for a contradiction between the critical realist ontology and method is formally stated the counter-intuitive nature of transcendental deduction will be confirmed against possible critical realist objections.

Inversion of Form and (Fixed) Essence

Collier (1989), endorsed by Bhaskar (*Dialectic*, p.50), distinguishes between structural type and specific 'tokens' or 'structurata' of the type. An essential structure that has been hypothesised to underlie a social form may be instantiated (i.e. may exist in) a number of different ways, these different ways are its tokens or structurata. For example capitalism as it existed in the 1950s (which might be termed a period of 'Fordism') and capitalism as it exists now (which might be termed a 'post-Fordist' period) are two possible tokens of the same structural type, viz. capitalism. At the same time, and as shown above, a transcendently deduced structure cannot be rationally anticipated to produce a novel form; its essential feature is that it produces the specific form that served as premise for its deduction. For example, if the capitalist structure was, somehow, 'transcendentally deduced' from the premise of the 'wage form' then all possible tokens of the capitalist structure - so including the 'Fordist' and or 'post-Fordist' periods of its existence – must generate the wage form. This has the peculiar result that Bhaskar's 'forms' must remain fixed while his 'essences' (social structures) can have various specifications (different tokens or 'structurata'). Now, on the commonly understood

meaning of the terms 'form' and 'essence' the *essence* remains the same and the specific *form* can vary; this is what is usually meant by the term 'transformation'. Thus Bhaskar inverts the usual meaning of the terms 'form' and 'essence'. Undoubtedly the inversion is of great significance as regards the critical realist interpretation of Marx. When Marx referred to 'phenomenal forms' did he make the same peculiar inversion or is he not a critical realist after all? This issue will not be explored directly below though section three will present an interpretation of Marx which does not commit him to the inversion. Instead the argument will focus upon the deficiencies of the commonly understood model of essence itself.

To avoid the terminological inversion referred to above it may be better to call the 'form' a 'pre-conceptualisation'. The essence of a transcendently deduced structure (its 'type') is then that it produces a particular pre-conceptualisation (that from which it was hypothesised). This essence must remain fixed through the many different tokens (*structurata*) through which it is instantiated. Thus in the example above both capitalism in the 1950s (the 'Fordist' period) and now (the 'post-Fordist' period) must generate the pre-conceptualisation of the wage. The problem with this is that the key difference between the social and natural realms is supposed, on the critical realist view, to be that in the social realm, unlike the natural realm, the essential structural level is *not* fixed. On the contrary essential social structures (and not merely '*structurata*') are supposed to be reproduced *and transformed* through the medium of social agency. For critical realism, it is precisely such *essential* structural transformation (summarised in the term 'development' and analogous to biological examples such as that of chicken and egg employed above) that constitutes the significant aspect of human history. Critical realism *promises* to sustain development but this is precisely what the fixed essence structures generated by the critical realist method are incapable of. The only significant change of social structures that can occur is their complete *abolition*. So, for example, any move from one period of capitalism (e.g. Fordism) to another (e.g. post-Fordism) (from *any* 'token' of capitalism to another 'token') would have to be considered entirely inessential and correspondingly insignificant. In other words the critical realist method results in a conception of essential structures as rigid. Essential structural transformation or development through the medium of agency cannot be sustained. Whereas the critical

realist social *ontology* requires that social structures are reproduced or *transformed* by social agency, the critical realist *method* ensures that all theorised social structures are essentially reproduced or *abolished* through that medium.

(Dialectical) Critical Realist Objections

The account of transcendental deduction above shows it to be not only restrictive but counter-intuitive. For the relation between exchange value ('social form') and private commodity production ('hypothesised structure') is not plausibly understood as that between hypothesis and form. Rather the one would seem inconceivable without the other *prior* to any empirical 'test'. Similarly for the relation of the wage form to underlying 'doubly free' labour – though this case is less clear cut. The same considerations apply to typical examples of social structure, such as the marriage relation or that between landlord and tenant. No empirical test would seem to be required to establish these underlying social structures; they are conceptually necessary prior to any such test. Only the Marxian invocation of 'socially necessary labour time' bears any close resemblance to the notion of a hypothesis to be tested.⁴ One reason for the enduring appeal of critical realism is that both Bhaskar himself and other prominent critical realists such as Andrew Sayer do *appear* to accommodate the observations made above. The constraints of transcendental deduction are sometimes either obscured or even denied. Sayer and Bhaskar will be considered in turn below. Both authors, it will be argued, do adhere to the account of transcendental deduction presented above but fail to recognise the stasis generated by the method. This will strengthen and clarify the general argument that the critical realist social ontology is necessarily incompatible with the critical realist method.

Sayer (1992, ch. 3 and ch. 4) recommends that the internal relations that define social structure should be worked through prior to empirical work and so *appears* to break free from the constraint of transcendental deduction as described above. Sayer's recommendation is based on the recognition that there must be *implicit* knowledge of

⁴ Hausman (1998) makes a similar point, though in a different context, but fails to note that the key critical realist 'non-observables' to be hypothesised are social structures understood as sets of internally related positioned-practices.

internal relations; knowledge not immediately explicit to the mind. However, the appearance that Sayer has broken free of transcendental deduction is illusory. Sayer fully subscribes to the critical realist view that there is no intrinsic link (isomorphism) of thought and its object but that they causally interact (*ibid.*, pp.65–71 and p.162). The fact that the working through of internal relations prior to empirical work provides a grasp of real objects therefore becomes almost inexplicable. The only explanation can be that the internal relations are the result of *prior* transcendental deductions (this is made clear by Sayer, *ibid.*, pp.160–62).⁵ So the critique above, demonstrating that the procedure of transcendental deduction, based on a non-isomorphism of concept and object, precludes any theory of transformation and is highly counter-intuitive, applies to Sayer after all. The worth of Sayer's insights on the implicit knowledge of internal relations can only be sustained (and, indeed, will be developed fundamentally) by the transcendence of critical realism.

Bhaskar's notion of 'judgmental rationality' (e.g. *PON*, ch. 2) entails that it is, and must be, possible to adjudicate rationally between competing theories despite the sharp distinction between concept and object. Does this notion undermine the contention made above that there can be no rationally discernible link between a form and underlying structure? By no means. The above exposition does not deny that judgements between theories are possible given a critical realist ontology and method; on the contrary it emphasises that critical realists root such judgements, ultimately, on empirical criteria. It is true that the difficulty of experiment acknowledged by critical realists serves to weaken significantly the ability of the social scientist to discriminate between theories. In this aspect the account above resonates with Collier's (1989) view that critical realists should be pessimistic as to the critical potential of social science – but the central argument does not rest on this point.⁶

⁵ Lawson (1997, ch. 16) recognises the importance of the process of 'abstraction' in a manner close to Sayer's stress on working through internal relations. Lawson's discussion makes it immediately clear that the process of abstraction is an aid to transcendental deduction rather than an alternative to it.

⁶ The fact that argument of this chapter does not rest on a critique of judgemental relativity does not imply that the argument implicitly rests on the assumption that the notion is sound.

Bhaskar's more recent development of 'dialectical critical realism' (*Dialectic, PE*) contains many elements that would suggest, at first sight, that the critique above is obsolete at least as regards Bhaskar's own work. For example, Bhaskar explicitly accepts that critical realism 'abstracts from' issues such as time and space which are central to transformation. It is precisely the aim of dialectical critical realism to reincorporate that from which was initially abstracted (*Dialectic*, p.8; see chapter 3 above). No stronger impression could be given that Bhaskar has, through his appropriation of dialectics, overcome the original limitations of his notion of transcendental deduction and so made the argument of this chapter obsolete than his explicit endorsement, in two footnotes (*ibid.*, p.184 and p.245), of Tony Smith's *The Logic of Marx's Capital* (1990). Smith elaborates a procedure, to be presented below, which is solely a reconstruction of a given set of categories making their implicit internal relations explicit and eschewing any recourse to transcendental deduction.

Bhaskar (*op. cit.*) qualifies his endorsement of Smith in two respects. Firstly he objects to the 'linearity' of the dialectic that Smith elaborates. Given that this 'linearity' is absolutely fundamental to Smith's entire project, Bhaskar's qualification suggests a misunderstanding of that project. Secondly, and what is crucial to the argument here, Bhaskar criticises Smith's omission of 'ontological' dialectic (and other forms of dialectic) on the supposition that they underlie Smith's own 'presentational' dialectic. In one sense Bhaskar makes a good point. It is true that Smith does not face directly fundamental 'philosophical' issues such as the mind-body relation, as argued in chapter 4 above. However the sense that Bhaskar has in mind is based on his (Bhaskar's) own treatment of such philosophical issues. The 'ontological' dialectics that Bhaskar advocates incorporate his polemic against subject-object identity (so non-isomorphism of thought and its object) and retain his emergence theory of mind. In consequence, dialectical critical realism does not identify the contradiction between the transformational ontology and the method of transcendental deduction as elaborated above. On the contrary transcendental deduction is retained and 'dialectical arguments' are subsumed as species of transcendental ones (*ibid.*, pp.107–8 and p.396). So Bhaskar falls prey to essentially

the same argument as does Sayer, though it must be couched in more elaborate terms, as follows.

In terms of dialectical critical realism, transformation entails 'absence'. It is the 'presence of an absence' that provides the continuity amid change that is characteristic of transformation (the theme of 'absence' and its connection to time and space runs throughout *Dialectic* – see chapter 3, above). The first stage of the argument above – showing that novel structural change or transformation cannot be theorised before its occurrence – translates into the argument that the 'absence' implicated in a novel structural transformation cannot, in general, be identified until after its occurrence – this is explicitly acknowledged within dialectical critical realism (for the case of the transformation of knowledge see *Dialectic*, ch. 1, especially, p.24, p.31 and p.34). Such identification entails essentially the same procedure of transcendental deduction, now expanded to include dialectical arguments, as that elaborated above. The next stage of the critique above translates into the position that, because of the non-identity of object and concept, underlain by Bhaskar's emergence theory of mind (SEPM), the 'absence' implicated in structural transformation can no more be 'discovered' *ex post* than prior to the occurrence of the transformation. Thus the continuity of essence that would be provided by the ability to discover an absence is denied and, as above, the only significant change of structure that can be theorised through the (dialectical) critical realist method is its complete *abolition* rather than transformation. Bhaskar enriches his *ontology* through dialectics and the notion of absence but does not and cannot, given the fundamental tenets of critical realism and dialectical critical realism alike, recognise and amend the inability of his *method* to theorise absence and so transformation.

The Practical Consequences of Critical Realism

The critique above suggests that much critical realist inspired practice is likely to take place unaware of the hidden restrictiveness, indeed basic implausibility, of transcendental deduction. For example, the necessary link between a social form such as exchange value and the social structure of generalised commodity production will be taken for granted by the theorist; the link will not somehow be 'transcendentally

deduced'. This raises the question of the practical consequences of critical realism. In important respects critical realism is useful. For one thing critical realism provides a healthy antidote to some of the more extreme yet widespread 'applied methods' in social science and economics. Lawson's (1997) methodological critique of orthodox economics and Sayer's (1992) related discussion of the limited place of quantitative methodology are prime examples. Also critical realism provides useful positive guides to social scientists. Examples include the relational conception of social structure; Sayer's recognition of the need to make implicit internal relations explicit based on the critical realist conception of causality; and some of Lawson's methodological recommendations. Furthermore a great debt is owed to Bhaskar not least for his introduction of the notion of 'dialectics' into social scientific debate. However it remains the case immense problems face critical realist practitioners.

A number of authors have commented that it is inherently very difficult to *interconnect* the many social structures, conceived in critical realist terms, implicated in social life (Jessop, 1995; Jones, 1997; Joseph, 1999). Given the variety of social relations, e.g. employer / employee, teacher / student, husband / wife, citizen / state, landlord / tenant, etc. there is the danger that it may be impossible to 'see the wood for the trees'. The key critical realist concept of structural interconnection is 'stratification' (e.g. *Dialectic*, pp.49–56 and p.162; see previous chapters) but beyond the mere assertion of the primacy of one social structure (e.g. that of the economy) or another it would seem difficult to employ the notion effectively in substantive work. Problems are compounded given that such work must also incorporate the role of agency. Critical realism tells the social scientist that agents reproduce and transform structures but just what structures are being reproduced, and how, are entirely matters for substantive work (*SRHE*, p.124; Lawson, 1997, Part IV). The section below will confirm that it is virtually impossible for a critical realist social scientist to satisfactorily articulate structures (and so agents). The 'systematic dialectical' transcendence of the critical realist method affords a general solution to the problem of interconnection of social structure that cannot be provided by critical realism or indeed any other well known method.

New Dialectics and Systematic Dialectics

'New dialectics' refers to a recent trend amongst social scientists and philosophers towards a reassessment of the Marx / Hegel relation. Chris Arthur (1993a) coined the term; Castree (1995) and Saad-Filho (1997c) provide overviews (see also chapter 4 above). A common theme, amongst the otherwise diverse positions held by new dialecticians, is some form of defence of Hegel against Marx's early critique. Instead of emphasising Marx's criticisms, new dialecticians argue, though in contrasting ways, that Marx's theoretical work employs Hegel's method to a degree far greater than recognised in most of the secondary literature (including Bhaskar's *Dialectic*) and, furthermore, that this method is a contributor to the superiority of Marx's theory. One important respect in which the arguments of respective new dialecticians vary is according to their relative attraction to two opposing theoretical poles: at one pole capitalism is considered to constitute a perverse reality mirroring Hegel's idealism (e.g. Arthur, 2002); at the opposing pole Hegel's method is interpreted as a materialist one (e.g. Smith, 1990). This section draws from a specific branch of new dialectics, termed 'systematic dialectics', in order to present a method for social science that overcomes the implausible and self-contradictory method of critical realism (and dialectical critical realism) critiqued in the previous section.

Given that the critique above turned on the non-isomorphic and causal relation between thought and its object underlain by Bhaskar's theory of the mind / body relation (SEPM), the key question, from a critical realist standpoint, is just how can SEPM be replaced without entailing a reductionism or dualism and, more broadly, without falling into the epistemic fallacy and related fallacies? It must be admitted at the outset that a satisfactory response to the question cannot be found within new dialectics. Quite to the contrary, the issue of the mind / body relation is so little addressed as to suggest that the relation is without import in any 'new dialectical' framework. As noted in chapter 4 above, the symposium on Marxist dialectics in *Science and Society* (1998), Issue 62, Number 3 – with contributions from new dialecticians such as Chris Arthur, Thomas Sekine and Tony Smith – did not contain any direct reference to the mind / body relation. It is for this reason that E. V. Ilyenkov (1977; 1997) was drawn upon in chapter 4 above. Ilyenkov provides the

argument for an isomorphism of thought and object that legitimates some aspects of the general new dialectical methodology, despite the idealism of this methodology. Chapter 6 and 7 below will examine in detail the idealist deficiencies of contemporary and Hegel-inspired new dialectics, arguing that this method precludes comprehension of Marx's labour theory of value. This chapter will emphasise the positive features of new dialectics, and will not discuss value theory in any detail.

The presentation immediately below draws upon a specific branch of new dialectics, termed 'systematic dialectics' (Smith, 1990; Arthur, 1998; Reuten and Williams, 1989). The method of systematic dialectics will be brought out employing a distinctive terminology, and distinctive gloss, rather than adhering to any one author in particular.⁷

The Starting Point for Systematic Dialectics

The key initial distinction for the method of systematic dialectics is that between the *transhistorical* and *historical* levels of generality and extension. 'Transhistorical' notions are those which are universal through *all possible* social formations, whatever their specific differences. For Hegel such transhistoricals can be summarised in the term 'spirit' or 'rationality' (Pinkard, 1996; Smith, 1990). For Marx the notion of 'labour' or 'social production' encapsulates his approach at this level (Smith, 1990; Ilyenkov, 1977; see chapter 4 above). 'Historical' notions are only universal through, and so definitive of, *individual* social formations. Returning to Hegel, each society is seen as a *specific form* of spirit or rationality, whereas Marx, by contrast, viewed each society as a *specific form* of labour or, in other words, a specific mode of social production. It is to this historical level that systematic dialectics applies.

At this early stage an important question arises: is systematic dialectics a method applicable only to the *current* mode of social production, viz. capitalism, or is it

⁷ Working within the fields of sociology and human geography, Roberts (1999; 2001a; 2001b) contrasts systematic dialectics to critical realism in a way that complements the approach developed within this chapter.

applicable to other social formations, such as feudalism? According to some authors (e.g. Arthur, 1998), systematic dialectics can be applied only to capitalism. Systematic dialectics traces the development of a highly peculiar and dominant abstraction termed 'capital' (money that begets more money). Outside of capitalism systematic dialectics would be of no use to the social scientist, on this view. Other authors (e.g. Smith, 1990) take the opposite view that systematic dialectics is applicable to societies other than capitalism. Systematic dialectics makes reference to a 'whole', a structured totality, without any connotation that it is a particular type of structured totality, such as one dominated by the abstraction of capital. In order to reproduce and develop it is necessary that a structured whole possesses a moment of unity, i.e. there must be some degree of co-ordination of the individuals within a system such that the system (structure) endures. Yet, it is by no means necessary that the moment of unity should gain independent and dominant form. The fact that this occurs within capitalism is grasped through systematic dialectics but is not necessary for the applicability of this method. Chapter 4 above supports this latter contention drawing, however, upon Ilyenkov's (1977) rather than Smith's (1990) interpretation of Marx and Hegel. Whichever view on the matter is taken it remains the case that systematic dialectics is required in order to comprehend capitalism and that critical realism is deficient in this regard. The example of grasping capitalism will be used to illustrate the method below.

The Systematic Dialectic 'Method of Enquiry'

The method of enquiry begins by recognising that there are many historical categories (denoting aspects of the real social totality), universal through, but specific to the current mode of social production, that is, capitalism. For example, there are specific forms of state, ideology, gender and religion, which have been subjected to much scrutiny across the social sciences. On this, critical realism and systematic dialectics can concur. The difference between systematic dialectics and critical realism is first revealed in the *purpose* of the method of enquiry within systematic dialectics. This purpose is to search for the most *abstract* and *simple* category from which to comprehend the structured totality.

On the systematic dialectic interpretation of Marx's method of enquiry, Marx was led down a definite categorical chain: Marx recognised, for example, that the capitalist state is bound up in the process of capital accumulation, most obviously through fiscal and monetary aspects. *Equally*, it is absolutely true that capital accumulation is bound up in the state (through the very same links). But to *comprehend* both fully (at this 'historical' level of extension and generality) one is led, in thought, to consider capital accumulation before the state. In terms of the notion of systematic dialectics, this is because capital accumulation is a more *abstract* and *simple* category than the state. Note that the terms 'abstract' and 'simple' have an ontological as well as an epistemological connotation: from an epistemological perspective, capital accumulation is considered more abstract and simple than the state because, from an ontological perspective, capital accumulation *is* more abstract and simple than the state. Yet, when considering capital accumulation, one is led, in thought, back to the specific form of money under capitalism, and from there, on Marx's view, back to the specific 'commodity-form', also termed by Marx the 'value-form' of the product.⁸ This illustrates how, from the perspective of systematic dialectics, the method of enquiry systematically moves from an initial 'chaotic conception of the whole', through 'ever more simple concepts' until it reaches the most *abstract* and *simple* category, the commodity-form (Marx, 1973, p.100). This is the 'cell-form' or, in Hegelian language, the 'abstract universal' (Reuten, 2000). The cell-form marks the end of the method of enquiry and forms the starting point of the method of presentation. For systematic dialectics, the purpose of the method of presentation is to develop a comprehension of the whole on the basis of this starting point. The cell-form will be examined closely below.

⁸ This statement follows Banaji's (1979) interpretation of the starting point of Marx's *Capital*. The issue of Marx's theory of value is taken up in chapters 6 and 7 below, where it will be argued that the idealism of contemporary and Hegel-inspired systematic dialectics precludes comprehension of Marx's labour theory of value. As noted above, these issues are glossed over in this chapter to emphasise the positive features of systematic dialectics, the superiority of this method to that of critical realism.

The 'Cell-Form'

The category of the commodity-form articulates an abstract and simple social structure, specifically, a structure whereby production generally takes place in individual units outside of direct social compulsion, for the purpose of exchange. Now this is indeed an incredibly abstract and simple notion. It has no further *historical* content than that just outlined. It does contain all *transhistorical* content as encapsulated, on Marx's view, by the notion of labour or social production. But its *specific historical* content is minimal. All such historical content (such as the specific forms of money, capital, state, religion, ideology and gender) has been abstracted *away from* in thought. So far then, there would seem nothing to distinguish this notion of abstraction from that of critical realism, as discussed in the previous section and in chapter 2 above. That is, 'abstraction' appears as a process of analysis that is *prior to* a stage of synthesis, of reintegrating or 'articulating' the concrete. However, there is another side to the commodity-form. For, this category does refer to the whole, the specific social totality, if only abstractly and simply. The real social *totality*, known as capitalism, can be characterised, or defined, at the most abstract and simple level of all, as the society of generalised commodity production. Private production for exchange is the most abstract and simple mode of *connection* of the millions of individuals (people, groups, firms, etc.) within capitalist society, a mode specific to that society. In this way, there is a *synthetic* side to abstraction. The abstraction of the cell-form precisely transcends the immediate appearances of isolated, haphazard categories by 'focusing' upon their very aspect of unity; upon their constitution as a whole. By focusing upon the cell-form it is possible to 'see the wood for the trees', to reveal the universal in the particular. The cell-form or abstract universal is, then, very abstract and simple. But, by the same token, it provides a way of *bringing the whole in*.

It would be wrong to suggest that the difference between critical realism and systematic dialectics is merely a matter of terminology. The abstraction of the cell-form is simultaneously a process of analysis (of bringing something into focus) and of synthesis (it is the whole – the mode of connection of the individuals within society – that is focused upon). It is not that systematic dialecticians have merely chosen to

give two different processes, viz. analysis and synthesis, the same name ('abstraction'), whereas critical realism has, equally legitimately, chosen to restrict the term 'abstraction' to the former but not the latter process. Rather, for systematic dialectics, analysis and synthesis occur simultaneously as two, inseparable sides of a single process of abstraction, viz. the abstraction of the cell-form. The critical realist urge to 'combine' or 'articulate' abstractions so as to grasp the moment of synthesis is, in this case, misplaced because synthesis is essential to the process of abstraction itself. This point is important to the extent that critical realists claim to provide a *general* theory of abstraction and hence a general method. As is well known, general claims can be falsified by one specific counter-example. The abstraction of the 'cell-form' of capitalism, where analysis and synthesis constitute a single process of abstraction, is a specific counter-example to the general claim that abstraction is a process of analysis that is *prior to* a separate process of synthesis. Any claim that critical realism provides a general theory of abstraction is thereby falsified. More fundamentally this new notion of abstraction suggests a practical solution to the problem of 'articulation' unavailable to critical realism, to be developed further below.

The Method of Presentation

How does the presentation proceed from the 'cell-form'? The method of presentation entails that, once the most abstract and simple category (in Marx's case, the commodity-form) has been focused upon, then the next most simple and abstract category is introduced. There are two crucial features of this next category. Firstly its introduction is not arbitrary; rather it is systematically *required* upon consideration of the original category. The literature on systematic dialectics suggests at least three ways in which this requirement can transpire. Firstly the focus upon the initial category might reveal that the social structure defined by the category cannot reproduce itself; that it cannot provide for its own conditions of existence (Reuten, 2000; Reuten and Williams, 1989). In the case of the commodity-form, for example, it could be argued that a generalised system of commodity production cannot exist without a 'universal equivalent' representing the value of all commodities, and providing a medium of exchange. Secondly, and closely related to the first type of

'forward impulse', it might be argued that *agents* within the commodity-form would *necessarily tend* to introduce money (Smith, 1993). Agents would tend to measure exchange values in a single commodity and they would introduce this commodity (the 'universal equivalent') as a medium of exchange. Thirdly there may be simply a 'backward justification' whereby it is obvious that, having focused upon the commodity-form, the next most simple and abstract category, as appropriated in the prior method of enquiry, is the money-form.⁹

The second crucial feature is that the next category is a *development* of the first category. Thus the money-form contains all the features of the commodity-form – the money-form, like the commodity-form, defines a social structure of individual production for exchange – but now more aspects have been developed, viz. money itself. This new category is more concrete and complex than the commodity-form, nevertheless it remains very abstract and simple.¹⁰ The remarks made above regarding the abstract status of the commodity-form (the cell-form) therefore carry over to the money-form. The forms of capital, state, religion and gender have been abstracted away from at this stage. Yet this is not merely a process of analysis. Rather the money-form 'captures' the whole, if only abstractly. In everyday life commodity value *is* measured by money and generalised commodity exchange *does* occur through the medium of money. The money-form is the next most simple and abstract way of defining the specific mode of connection of the *entire social totality*. It brings that specific totality slightly more 'into focus' than is the case for the commodity-form through the process of introducing money. And it therefore enables a slightly clearer comprehension of the totality than the commodity-form. Thus the

⁹ This notion of 'backward justification' is an interpretation of Smith (1993, p.34, n. 6). Arthur (1998) argues for a more complex notion of 'backward pull' based upon the insufficiency of any abstract category to grasp the internally related totality of which it is part. Though not stressed above, it is possible to characterise the development from abstract and simple to concrete and complex as driven by 'contradiction'. For example, there is a contradiction between the claim that the commodity-form grasps a totality and the fact that it cannot reproduce itself as such. A more concrete and complex category, viz. the money-form, is necessary in order to resolve the contradiction.

¹⁰ The derivation of categories developed above is an application of systematic dialectics to *capitalism*. For this reason, the relationships that are developed between commodities, money, and further categories, should not be 'read back' into pre-capitalist societies; there can be no presumption that commodities and money play the same role in pre-capitalist societies as they do in capitalism.

way in which all aspects of the totality systematically interconnect is better comprehended. Simultaneous to the process of analysis there is a process of unification, or synthesis, in systematic dialectical abstraction, a process little explored by critical realism.

It will be apparent that the method of presentation (or reconstruction) does not stop at the level of the newly derived category. Rather, once again, there will be a systematic imperative to move the focus from the money-form to the next most simple and abstract category. Once again, there are a number of approaches towards articulating just how such a forward impulse arises. Smith (1993) argues that, given a social structure of *generalised* commodity exchange in which money acts as a simple medium of exchange, people will *necessarily tend* to exchange for the purpose of making money. They will tend to do this in order to hedge against the risk of being unable to sell the individual commodities that they own. The social form where money has become the end of exchange, rather than its mere medium, defines the next, more concrete and complex category, the capital-form. Smith's argument provides a 'forward impulse' for the introduction (or 'dialectical derivation') of the capital-form. Alternatively, a 'backward justification' of the capital-form's introduction is readily apparent: the capital-form, at its most simple, comprises money and commodities; in order to comprehend the capital-form it is, therefore, first necessary to comprehend the commodity and money-forms. Having done this, the capital-form, newly grasped as a development of the commodity and money-forms, stands as the next most simple and abstract category of the totality.

The capital-form can be developed through many levels of increasing concretion and complexity. Smith (1990), for example, attempt to show how the abstract and simple definition of the capital-form can be developed so as to derive the entire systematic content, the 'underlying architectonic', of the three Volumes of *Capital*. Most importantly, the development of the capital-form reveals the origin of profit in exploitation, and the simultaneous mystification of this origin in concrete reality (see

chapters 6 and 7 below).¹¹ Furthermore, Smith (2000b) and Reuten and Williams (1989) attempt to derive the definitive features of the capitalist state, illustrating how, at these more complex levels, there is a great deal of contingency intertwined with the derived necessary relations. To take just one example, it is contingent, relative to the categorical development, whether the capitalist state takes the form of a democracy or a dictatorship. But no matter what form is taken, the state must still reproduce the opposition between use value and value, between capital and labour, between price and value, even as it develops these oppositions and attempts to cope with their effects. Thus through an iterative process dialectical derivation, a more and more focused comprehension of the real social totality is developed, from the abstract and simple cell-form to ever more concrete and complex levels of social reality.

At this stage another crucial term, 'conditions of existence', can be shown to be given widely divergent respective interpretations by critical realism and systematic dialectics. This will further clarify the method of systematic dialectics. On Reuten and Williams' (1989) view, categorical development proceeds through successive 'conditions of existence'; each new category is a necessary condition of existence of the former category (e.g. Reuten and Williams (1989), Part One). Now, for critical realism 'conditions of existence' are entities necessary to the existence of a given form or structure. For systematic dialectics, on the other hand, the only given form or structure is the entire object realm (which is itself continually transforming) since the initial simple structure of the presentation is abstracted by thought and its condition of existence is precisely that it transforms into the new structure, precisely that it is not fixed and the same applies to each new, more complex and concrete structure.

The gulf between the systematic dialectical and critical realist notions of 'categorical hierarchies' follows from their respective views of 'conditions of existence'. Categories cannot be ordered according to a 'hierarchy of conditions of existence', as critical realists often suggest (e.g. *PIF*, p.179; Sayer, 1983), because all categories

¹¹ Chapters 6 and 7 will argue that Smith's interpretation is marred by its idealism such that Smith and other systematic dialecticians cannot comprehend the labour theory of value. This should not take away from Smith's achievement in setting out with utmost clarity the need for theory to develop immanently from abstract to concrete. The positive features of Smith's work are stressed in this chapter.

are conditions of existence of all other categories. Instead categories are ordered according to a hierarchy from abstract to concrete; this hierarchy is developed in thought by tracing *reciprocal* conditions of existence as explained above. The 'intrinsic and objective order of categories' is the name given to this hierarchy. So, although using very similar terminology, the critical realist notions of a 'hierarchy of conditions of existence' (and so of 'social stratification') are very different to, indeed transcended by, the systematic dialectical notion of a 'hierarchy of categorical structures from abstract to concrete'.¹²

In sum the method of presentation is able to reconstruct the fundamental categories of the capitalistic mode of social production in thought precisely because it is able to grasp their content as necessarily interconnected through its transformation. The issue of historical transformation and concrete explanation is taken up below.

The 'Unity of Diverse Determinations': Historical Transformation and Concrete Explanation

The logical validity of the categories developed in *Capital* rests upon the ability of the method of presentation to successfully reconstruct the remaining fundamental categories of the object realm through further development of the essential social structure. The most obvious fundamental categories that remain are the 'state', 'foreign trade' and the 'world market' (Smith, 1990, p.200). It would therefore be a terrible error, from the perspective of systematic dialectics, to consider the theory in *Capital* complete. It would be especially damaging to suggest that *Capital* represents a completed work of 'the economic sphere' and that it is left to other social scientists to theorise other spheres such as that of politics or of ideology. Further, it would be perplexing for a systematic dialectician should she find that the various diverse spheres of society were claimed to be theorised somehow according to their own three stage procedure of starting point; method of inquiry; method of presentation. Yet such claims are a logical progression of the critical realist method. Bob Jessop's

¹² For the critical realist conception see Collier (1989); Bhaskar (*Dialectic*, esp. p.53 and p.353); Sayer (1992, esp. pp.140–43). Murray (1983, p.495, f.n. 33) succinctly sets out this aspect of the systematic dialectical transcendence of critical realism in his critique of Sayer (1983).

work (see chapter 2 above) is an influential attempt to outline and apply such a method.

The reconstruction becomes progressively more difficult as more and more complexity has to be considered. This is because historical contingencies begin to play a more and more crucial role (Fine, 1989, pp.69–72), and must carefully be articulated with the derived categories if the theory is to be developed further. It is possible however, to develop a grasp, even at an abstract level, of some strong tendencies for definite historical developments, as discussed below.

The progressive reconstruction of fundamental categories, based on systematic dialectics, provide a stronger and stronger grasp of the ongoing and systematic activities which are necessarily undertaken by social agents, i.e. the basic activities specific to capitalism which people necessarily undertake everyday. Such a reconstruction may simultaneously reveal any historical tendencies inherent in these activities. These will be tendencies of the totality of the given object realm. Equally there will be a vast amount of activity undertaken which is only systematic by chance or is not systematic at all. The systematic reconstruction cannot provide a grasp of such activities except in the negative sense of showing them to be non-systematic and so indeterminate relative to systematic dialectical reconstruction.

The above implies that historical tendencies are both *society-wide* and *medium to long run*; so they have implications for, but by no means fully determine, all phenomena in particular locations and / or in short spans of time. Social activities that are not necessarily systematic are not ignored. They are determinate in individual locations and over society as a whole. However because they are not necessary they fluctuate randomly, so in the medium to long run it is likely that the necessary systematic tendencies will prevail. For example it may be that one can derive a historical tendency for finance to overpower industry and state; this would have to be rigorously derived in the mode of presentation. The tendency would by no means imply that all individual nations must be dominated by finance or that, over short periods of time, finance will dominate in the world economy. On the contrary, there will be all kind of diverse aspects in play at any specific period of time and location.

However, if the derivation is valid, these diverse factors will have been shown to fluctuate randomly. This fluctuation is likely to be around a trend of increasing financial dominance. Note that tendencies are not certainties; it is possible but unlikely for random aspects to be systematic over long periods.

Concrete explanation, by locating the aspects of its specific object according to the hierarchy of categories established in the method of presentation, is able to identify both the aspects of its specific object that manifest necessary systematic activities (so historical tendencies), and those aspects which, however important to the individuals involved, have no systematic significance. In this way the method of systematic dialectics allows for all the diverse aspects, such as abstract pressures of capital accumulation and concrete (and logically indeterminate) individual biographies, to be simultaneously understood; indeed the logical validity of the method rests upon its ability to do this. Thus the method of presentation provides the basis for a 'unity of diverse determinations' (Marx, 1973, p.100) to be achieved. The universal and the particular, the abstract and the concrete, are each given their proper place in any concrete explanation. An example will be used to illustrate the difference of the method of systematic dialectics to that of critical realism in more specific terms.

'Fordism' and 'Post-Fordism'

According to certain critical realist accounts, the new developments in economic performance that have occurred since around 1974 in the Western economies represent a change in phenomenal form to be explained by hypothesising new social structural arrangements and mechanisms such as a move from 'Fordism' to 'Post-Fordism' (e.g. Jessop, 1990a; 1995). The critique presented above denies this claim and suggests that critical realist accounts are likely to be (more or less useful) *descriptions* of new phenomena.¹³ Hypotheses will not however lead to explanation

¹³ Jessop (1995) is insightful in this regard. He admits the 'abstract' and 'meso-level' concepts drawn from a critical realist method (argued to underlie the 'regulation approach'), such as his suggestion of a 'Schumpeterian workfare state', to be both speculative 'hypotheses' and to be descriptive rather than explanatory in character. He advocates the introduction of diverse aspects, especially the specific strategies of agents, to provide explanatory content to such hypotheses. Yet he cannot specify *how* the various aspects can be properly integrated. The argument of this chapter is

since, as argued above, critical realism provides no systematic basis upon which to theorise transformation and interconnection. Explanation requires the necessary interconnection of the phenomena to be grasped according to the method of systematic dialectics. Even the abstract derivation of the most basic categories definitive of capitalism (value and capital) articulate medium to long run tendencies of the capitalistic mode of social production. These derived categories help bring out the interconnections of different aspects of reality facilitating and calling for empirical investigation across many areas. For example, if it were possible to derive a historical tendency for finance to overpower state and industry in the mode of presentation then the 'Post-Fordist' move to 'globalisation' may be grasped as, amongst other things, a manifestation of this tendency through the many aspects in play. The relations between these many aspects and their relative (systematic) importance to the development of the capitalist system would be easier to discern. Further empirical work and theoretical development would be necessitated and facilitated by this abstract contextualisation. The derivation is thus of most use when it comes to explaining the medium to long run course of events, and to understanding fully the specificity and wider significance of particular events, in a rigorous and scientific manner. Critical realist inspired theories (and many others) are perhaps weakest in this respect – theorists often resort openly to speculation or opinion.¹⁴

Conclusion

The main arguments of the chapter are summarised below followed by a concluding remark.

The chapter presents systematic dialectical transcendence of the critical realist method for social science. Whereas critical realist method starts out from individual forms, the method of systematic dialectics starts from, in principle, the entire given realm. Whereas the 'method of inquiry' of critical realism consists in the hypothesis and test, according to explanatory power, of social structures, the 'method of

that critical realism necessarily precludes such integration; Jessop's difficulty is an outcome of his preferred methodology and is 'soluble' only by its systematic dialectical transcendence.

¹⁴ See previous footnote.

inquiry' of systematic dialectics consists in an appropriation of all relevant material of the object realm with the specific intent of reaching the most simple and abstract category. Whereas the 'method of presentation' of critical realism is a relatively secondary matter with all the hard work of theory done, the 'method of presentation' of systematic dialectics is of fundamental significance, for it should reveal systematically the development and interconnection of the fundamental categories of the object realm. In summary, whereas critical realist method is based on the attempted *hypotheses* of non-actual structures and mechanisms, that of systematic dialectics is based on a *reconstruction* of the totality already given at the very starting point. For this underlying reason the method of systematic dialectics *consists in* the tracing of necessary structural interrelations through immanent structural transformation. If successful this procedure reveals the tendencies for historical transformation of the object realm. By contrast, neither transformation nor necessary interconnection can be accommodated by the critical realist method.

Critical realism and systematic dialectics share the same broad scope and the same broad goals: knowledge of the real world and human emancipation. It is to be hoped that critical realists and systematic dialecticians work together towards these aims. To this end a careful examination and debate of their relation is vital. This chapter has aimed to contribute significantly to that debate. Despite the great gains of contemporary and Hegel inspired systematic dialectics, it has also been noted in this chapter that the method suffers from idealism. Chapters 6 and 7 below will serve, amongst other things, to recast systematic dialectics on the materialist basis of Ilyenkov's philosophy. These chapters will argue for a specific interpretation of the labour theory of value and surplus value, and will critique the inability of contemporary and Hegel inspired systematic dialectics to uphold that theory.

Chapter 6. Recasting Contemporary Social Theory: Marx's Labour Theory of Value

Introduction

The previous chapters have developed a critique of the philosophy and method of critical realism. They have also developed the abstract basis of an alternative to critical realism, viz. the philosophy of materialist dialectics and the method of systematic dialectics. Though the idealist shortcomings of contemporary and Hegel-inspired systematic dialectics have been noted, it remains to recast systematic dialectics within the materialist mould of Ilyenkov and, correspondingly, to bring out in more concrete terms the idealist deficiencies of contemporary and Hegel-inspired systematic dialectics (despite the latter's superiority over critical realism). More broadly, the argument thus far has *promised* much regarding the ultimate goal, that of forging a basis for addressing the global economy, but has remained at the level of philosophy and method, aloof from the essence of contemporary global capitalism, viz. capital itself, except by way of 'example'. This and the subsequent chapter focus upon the theory of contemporary society (capitalism), drawing together and developing the philosophy and method advocated in previous chapters. Marx's theory of contemporary society is based upon the labour theory of value. As Marx puts it, '[t]he basis, the starting point for the physiology of the bourgeois system – for the understanding of its internal coherence and life-process – is the determination of *value by labour time*' (Marx, 1972, p.166). It is therefore, *prima facie*, a curious fact that the theory is much maligned not only outside of but also within Marxism. This chapter argues for a recasting of contemporary socio-economic theory on Marx's declared basis of a labour theory of value. The next chapter will further develop and substantiate Marx's labour theory of value through an interpretation of the theory of surplus value.

For clarity of exposition, the main argument of this chapter will not be cluttered with a detailed engagement with the voluminous secondary literature on value theory. Rather the issue of the relation of materialist to idealist interpretations of value theory will be brought out. In particular, it will be argued that the idealism of contemporary

and Hegel-inspired systematic dialecticians both explains and undermines their view that Marx's alleged inability to break fully with the problematic of classical political economy (Reuten, 2000; Reuten and Williams, 1989), or his alleged methodological 'confusion' (Arthur, 2000), serves to invalidate Marx's key initial argument regarding value. Though other critiques have also portrayed systematic dialectics and more broadly 'value form theory' (of which systematic dialectics is a sophisticated variant) as idealist, the critique in this chapter is distinguished by its deployment of Ilyenkov's (1977; 1982) materialist dialectics. In particular, this chapter draws upon materialist dialectics in order to advance a distinctive interpretation of Marx's argument that abstract labour is the 'substance' of value.¹ The contemporary debate regarding systematic dialectics can be grasped anew in the context of this interpretation. More generally, the chapter aims to bring out the contemporary importance to social theory of these, at first sight perhaps, esoteric matters. Thus the exposition aims to locate the main argument within the contemporary social sciences and thereby to demonstrate the importance of Marx's labour theory of value to social theory. Nothing less than a recasting of the latter on the basis of the former is advocated below.

This chapter is ordered into two main sections. The first section attempts briefly to assess and partially explain the status of the labour theory of value within the contemporary social sciences. It is suggested that the theory is, for the most part, in disrepute or simply ignored and that the text of Marx's opening argument in *Capital* contributes to this state of affairs because the argument does not conform to

¹ Saad-Filho (2002, ch. 1) also draws upon Ilyenkov in order to argue that systematic dialectics is idealist. It was noted in chapter 4 above that Saad-Filho's interpretation of Ilyenkov's philosophy differs in some important respects to that presented in chapter 4. By contrast, there are no major inconsistencies between Saad-Filho's interpretation of the labour theory of value and that presented below. However, unlike Saad-Filho, the argument below focuses upon Marx's opening paragraphs, and in doing so provides an essential addition to, and deepening of, Saad-Filho's interpretation. Very few other Anglo-American authors have made Ilyenkov's materialist dialectical comprehension of Marx's labour theory of value central to their own. One outstanding exception is Pilling (e.g. 1980). The interpretation below, *inter alia*, develops Pilling's work, and that of Ilyenkov himself, in the light of recent debates on value theory. It can be noted that Pilling (*ibid.*) has been a catalyst for, and enduring influence upon, these debates and thereby, through Pilling, Ilyenkov's work has indirectly influenced contemporary value theory. However, it should also be noted that Pilling is best remembered as an initiator of 'value form theory' (critiqued below), whereas he was, in fact, primarily concerned to argue for the relevance and nature of materialist dialectics, as applied to contemporary political economy. Pilling's own glowing assessment of Ilyenkov (1977) can be found in Pilling (*ibid.*, pp.198-9).

contemporary standards of 'logic' and 'science'. The second section presents a novel interpretation of Marx's labour theory of value, drawing upon Ilyenkov's materialist dialectics. In opposition to the common view, and to contemporary and Hegel-inspired systematic dialectics, it is argued that Marx's labour theory of value should be at the core of contemporary social theory. Conclusions follow.

Contemporary Social Theory and Marx's Labour Theory of Value

Firstly this section will review the place of Marx's labour theory of value within the contemporary social sciences. The review is brief and straightforward because the theory is, for the most part, in disrepute (or simply ignored). Secondly Marx's own initial arguments establishing the existence of value as determined by labour time are scrutinised, along with the various reasons why prices will, unless by chance, not be proportional to labour times within capitalism, amongst them the so-called 'transformation problem'. The clear invalidity of Marx's opening arguments when judged by the 'logical' standards prevalent today, coupled with the empirically manifest divergence of prices from labour times, are suggested to explain partially why the labour theory of value is in disrepute. Contemporary and Hegel-inspired systematic dialectics is shown to reinforce, rather than counter, the view that Marx's key initial arguments are invalid. In the face of the objections raised within this section, the subsequent section aims to vindicate Marx's labour theory of value, drawing upon materialist dialectics and critiquing the idealism of contemporary and Hegel-inspired systematic dialectics.

The Contemporary Status of Marx's Labour Theory of Value

Generalising across the social sciences is a straightforward and unobjectionable exercise when it comes to Marx's labour theory of value. Quite simply, the structure of academic disciplinary boundaries is not built around Marx's theory (such an idea would never have been entertained by, and would likely seem absurd to, many academics), and no individual discipline is dominated by it. More difficult and contentious is to characterise the disciplinary boundaries positively, though some such attempt is necessary given the aim of this chapter. Confining the focus to the

economics / non-economics (especially sociology) split, it is possible to argue strongly that the marginalist revolution of the latter half of the nineteenth century, transforming 'political economy' into mere 'economics', was a key development, allowing economic science to leave any consideration of social form to other disciplines and to concentrate instead upon *homo economicus* (Clarke, 1982; Pilling, 1980; Fine, 1980; Mavroudeas, 1990). Weber's influential typology of action comes closest, perhaps, to approximating a characterisation, and rationalisation, of traditional academic boundaries, though Weber considered himself an economist / historian and bemoaned being pigeon-holed as a 'sociologist' (Weber, 1978; Parsons, 1937; Habermas, 1985). It is this traditional split between economics and 'the rest' that has been complexified by the recent colonising tendencies of economics (Fine, 2001a).

Taken as a whole, Marxist theory has been infected by the academic disciplinary structure. Within 'Marxist economics' the labour theory of value remains the subject of debate but is not prevalent (see below). The treatment of Marx in sociology (as reflected for example in text books such as Giddens, 2001; Craib, 1992; and Layder, 1994), on the other hand, is likely to be centred around more abstract and qualitative considerations, such as structure and agency, historical materialism, the Frankfurt School, structural Marxism (Althusser) and critics (E.P. Thompson, post-structuralists),² the subsequent post-modern turn (e.g. Laclau and Mouffe, 1985) and beyond. Though Marx's qualitative characterisation of alienation and exploitation cannot but be recognised, any quantitative discussion of the determination price, wage and profit magnitudes by labour time is at best peripheral and more likely ignored or glossed over, perhaps as matters of 'economics' rather than 'sociology'.³ Accordingly Giddens' (1981) critique of Marx is entitled *A Contemporary Critique*

² It is notable that, despite their great respective influences on Marxist theory, neither Althusser nor Thompson show much faith in the labour theory of value. Althusser (1971, pp.79–80), famously recommends skipping the initial chapters in *Capital* on value (see Pilling, 1980, pp.130–35); Thompson (1978) believes that Marx, in *Capital*, becomes trapped in the problematic of classical political economy.

³ Spencer (1998) illustrates these themes for the case of the labour process. Firstly he makes the general point that the split between sociology and economics has hindered study of the labour process. Secondly he laments the lack of value theory in contemporary labour process theory.

of *Historical Materialism*; Giddens has no need nor desire to bother with Marx's labour theory of value.

The critical realist interpretation of Marx's labour theory of value was borne outside of the economics profession (see chapter 2 above) and is a good illustration of the point at hand. The whole line of development, from Geras (1986), through Mephram (1979), to D. Sayer (1983), picked up by Bhaskar (e.g. *PON*, ch. 4), Jessop (e.g. 1982), A. Sayer (1992, ch. 4), and most recently Fleetwood (2002), consists of theorists who have never actually employed the labour theory of value, in both its qualitative *and* quantitative aspects. Indeed, Geras (1986) has repudiated the theory; A. Sayer, at no point in his work (e.g. 1981; 1992; 2000) affirms it, nor uses it; Jessop (1990a, p.183) states that the labour theory of value has been 'discredited'; and Fleetwood (2002, esp. pp.57–8, p.82) explicitly denies *any* quantitative dimension to Marx's value theory.⁴ The exposition below demonstrates the importance of the labour theory of value in both qualitative *and* quantitative dimensions and can therefore be viewed as an implicit critique of critical realism and of any other method that obscures this importance (see also Fine, 2001b).

For all that, there are Marxists who recognise the importance of, and employ, the labour theory of value in both its qualitative and quantitative dimensions. However, contemporary debates amongst such Marxists display fundamental disagreements, as well as the pernicious recalcitrance of disciplinary boundaries. The example of the publication of, and diverse reaction towards, Robert Brenner's *The Economics of Global Turbulence* (1998) is revealing in this regard and highly germane: as a study of post war economic development it is an analysis of a most important socio-economic conjuncture, one that should, therefore, turn upon the theory of value employed. The debate surrounding Brenner demonstrates, firstly, that there is no consensus on what Marx's labour theory of value is, nor on what it implies for socio-

⁴ Ehrbar (e.g. 2002) is an economist who, on first appearances, is an exception in that he upholds the so-called 'new interpretation' of Marx's value theory. However, according to Fine, Lapavistas and Saad-Filho (2000) the new interpretation risks degenerating into the very sociological conception of the labour theory of value (a theory of qualitative exploitation, not of economic quantities), indicated above. The argument below will attempt to illuminate abstract foundations of Fine et. al.'s view.

economic analysis. To take one of the more extreme examples, Brenner would claim (personal communication), and Tony Smith (2000c) does claim on his behalf, to uphold Marx's labour theory of value whilst most commentators take him to reject it (e.g. Fine et. al. 1999; 2000). Secondly, disciplinary boundaries have some part to play in these differences. Defenders of Brenner's value theory are more prevalent outside of the economic profession and his critics are more prevalent within it. This despite the fundamental differences between 'Marxist economists' themselves. The editorial introduction to *Historical Materialism*, 2000, Issue 4, reproduced as the Appendix to this thesis, discusses these themes in more detail.⁵

To summarise, Marx's labour theory of value is mostly considered peripheral or a *curiosum* across the social sciences, where it is considered at all. Even amongst the work of many Marxists it does not figure prominently. Rarer still is it employed as, simultaneously, both a qualitative and quantitative theory as Marx himself viewed it (Marx, 1972, p.166, cited above; see also below). Amongst those who do employ the theory there is great divergence at the level of fundamentals. In all this, the split between the different academic disciplines, especially economics as studying economic quantities and other disciplines as embracing philosophy or qualitative matters of social form, has been and remains damaging even though the Marxist critique of bourgeois disciplinary boundaries is well versed. Marx's presentation of the labour theory of value in *Capital* must in some way contribute to the situation described above. Marx's arguments will be scrutinised below.

The 'Logical' Invalidity and Empirical 'Falsehood' of the Labour Theory of Value

The point of the next sub-section is not, it must be stressed, to set up criticisms of Marx's labour theory of value to be defended. Rather, this sub-section attempts to fathom how Marx's argument is perceived given the brief sketch of contemporary

⁵ Another example of the recalcitrance of academic disciplinary boundaries within Marxist value theory can be found in the work of the various systematic dialecticians discussed in previous chapters and below. Moseley (1993, Introduction) indicates that the various authors, though all embracing similar themes, found the disciplinary divide between, in this case, economics and philosophy of great significance such that they realised 'how valuable the interaction between philosophers and economists can be on these issues' (p.13, n. 10.). Moreover, the qualitative / quantitative split was evidently an important factor in this regard (pp.9-10).

social theory above and, correspondingly, to indicate possible ways in which the presentation in *Capital* contributes towards the current predicament of Marx's labour theory of value. In addition the sub-section will show how contemporary and Hegel-inspired systematic dialecticians reinforce the negative perception of Marx's key initial arguments for the labour theory of value. The subsequent section will offer an interpretation of Marx's labour theory of value that aims to dispel these perceptions and so critique contemporary and Hegel-inspired systematic dialectics.

The first three chapters of *Capital* appear, to the modern reader, to be quite possibly the most mysterious of any of the classic works in social science or the humanities. Marx recognises a problem of difficulty,⁶ and explains in the preface to the first edition that '[e]very beginning is difficult, holds in all sciences' (Marx, 1998a, p.20).⁷ Marx believes, however, that he has 'popularised' the very first few pages, concerning the substance and magnitude of value, 'as far as it was possible' and he expresses more concern with the subsequent presentation of 'value-form' (ibid., pp.20–21). Yet the argument concerning the substance and magnitude of value appears to be a blatant *non sequitur* at worst or, at best, a clumsily expressed 'hypothesis' (clumsy because never acknowledged as a hypothesis by Marx). Marx writes:

The wealth of those societies in which the capitalist mode of production prevails, presents itself as 'an immense accumulation of commodities,' its unit being a single commodity. Our investigation must therefore begin with the analysis of a commodity. (ibid., p.53)

The reference to the (unexplained) term 'mode of production', and the move from the general appearance of wealth as a commodity to the analysis of the latter, imply a prior analysis on Marx's part. Given that *Capital* is the follow up to Marx's *A Contribution to the Critique of Political Economy* (1987), containing the famous

⁶ Marx was painfully aware that his *A Contribution to the Critique of Political Economy* (1987) had flopped, no doubt for reasons of difficulty and downright obscurity; Engels was ever impressing upon Marx the need for accessibility (McLellan, 1976; Saad-Filho, 2002, pp.1–6; Smith, 1990).

⁷ In the preface to the second edition he notes also that, 'the method employed in *Capital* has been little understood' (Marx, 1998a, p.32), suggesting another possible source of difficulty.

preface on the materialist conception of history, it would appear obvious that the latter is the what Marx has in mind (*contra* Gunn, 1992, and Negri, 1991). Marx firstly discusses the use value of commodities, ending this discussion as follows:

Use-values become a reality only by use or consumption: they also constitute the substance of all wealth, whatever may be the social form of that wealth. In the form of society we are about to consider, they are, in addition, the material depositories of exchange-value. (ibid., p.55)

Some unfamiliar expressions are evident in this passage. The notion of use values 'becoming a reality' (being realised) in use; the notion of the 'substance' of wealth; the notion of 'social form' and finally the characterisation of capitalist use values as 'material depositories' of exchange value. It is in discussion of exchange value that Marx appears to move from unfamiliar language to invalid argument. Marx's argument is brief enough to be worth reproducing in full. Firstly Marx writes:

Exchange-value, at first sight, presents itself as a quantitative relation, as the proportion in which values in use of one sort are exchanged for those of another sort, a relation constantly changing with time and place. Hence exchange-value appears to be something accidental and purely relative, and consequently an intrinsic value, *i.e.*, an exchange-value that is inseparably connected with, inherent in commodities, seems a contradiction in terms. Let us consider the matter a little more closely. (ibid., pp.55–6)

So far so good. Marx is clearly arguing that the evident variability of the quantitative exchange relation between any two commodities through space and over time appears to rule out the view that commodities have an intrinsic value. It should be noted that Marx has already established that exchange value does have an inseparable connection with use value. This is so because Marx has already characterised the latter as the 'material depository' of the former. Due to the apparent contradiction he is motivated to examine the notion of exchange value further:

A given commodity, *e.g.*, a quarter of wheat is exchanged for *x* blacking, *y* silk, or *z* gold, &c.—in short, for other commodities in the most different proportions. Instead of one exchange-value, the wheat has, therefore, a great many. But since *x* blacking, *y* silk, or *z* gold &c., each represents the exchange-value of one quarter of wheat, *x* blacking, *y* silk, *z* gold, &c., must, as exchange-values, be replaceable by each other, or equal to each other. Therefore, first: the valid exchange-values of a given commodity express something equal; secondly, exchange-value, generally, is only the mode of expression, the phenomenal form, of something contained in it, yet distinguishable from it.

Let us take two commodities, *e.g.*, corn and iron. The proportions in which they are exchangeable, whatever those proportions may be, can always be represented by an equation in which a given quantity of corn is equated to some quantity of iron: *e.g.*, 1 quarter corn = *x* cwt. iron. What does this equation tell us? It tells us that in two different things— in 1 quarter of corn and *x* cwt. of iron, there exists in equal quantities something common to both. The two things must therefore be equal to a third, which in itself is neither the one nor the other. Each of them, so far as it is exchange-value, must therefore be reducible to this third.

A simple geometrical illustration will make this clear. In order to calculate and compare the areas of rectilinear figures, we decompose them into triangles. But the area of the triangle itself is expressed by something totally different from its visible figure, namely, by half the product of the base multiplied by the altitude. In the same way the exchange-values of commodities must be capable of being expressed in terms of something common to them all, of which thing they represent a greater or less quantity. (*ibid.*, p.56)

Undoubtedly many people, myself included, have pored over these paragraphs searching for their meaning and validity (*e.g.* Elson, 1979; Kliman, 2000; Rubin, 1982). Whatever the final conclusions of such intellectual effort the immediate reaction of even the most sympathetic reader is likely to be one of puzzlement. The

argument that Marx presents, illustrated by the (infuriatingly named!) ‘simple geometrical example’, does not seem to be quite as watertight as Marx obviously believes. A ‘logical’ counter argument is readily formed: there is no ‘logical’ necessity for the identity of diverse commodities, as exchange values, to be underlain by some ‘third thing’, common to them all, of which exchange value is merely the ‘mode of expression’ or ‘phenomenal form’ (Schumpeter, 1951, develops this view; Samuel Bailey had engaged Marx’s mind with similar views, see Rubin, 1982, p.108, and Kliman, 2000). It is ‘logically’ possible for commodities to have (many) exchange value(s) without any common substance; this much any beginner in a contemporary ‘philosophical’ or ‘formal’ logic course would soon learn to recognise, on being presented with an argument such as Marx’s. More pertinently, perhaps, there is no physical or, more generally, ‘natural’ necessity for the common substance, according to the conception of scientific laws contained in the best known philosophies of science, whether prescriptive (Kuhn, Popper, Lakatos) or descriptive (the current ‘recovery of practice’).⁸ At best it would seem that Marx is making clumsily a hypothesis for which he should not claim *necessity*.⁹

Systematic dialecticians echo the common sentiments regarding Marx’s invocation of a ‘third thing’ expressed above. Arthur (1993b, pp.76–7), for example, recounts the above argument against the invocation of a ‘third thing’ and writes, ‘it seems to me that this argument has much more force than most Marxists allow’. According to Arthur, in initially considering exchange value, ‘we have only the *postulate* of identity in essence and of common measure’ and ‘there need not, however, *be* any such identity or resulting immanent determination of exchange ratios’ (ibid., p.76). Arthur argues, in short, that Marx is wrong to claim *necessity* for the ‘third thing’ at this early stage of the theory. Only later theoretical developments can establish such necessity on Arthur’s view. The presentations developed by other systematic

⁸ Regarding the descriptive / prescriptive distinction see Backhouse (1994) and Lawson, Peacock and Pratten (1996).

⁹ The notion that Marx is making a ‘hypothesis’ accords with the critical realist method of ‘retroduction’, discussed in previous chapters above, whereby the social scientist is recommended to ‘hypothesise’ essential social structures on the basis of given ‘forms’. It can be noted, however, that Marx refers to a common third ‘thing’ of definite magnitude contained in the commodity, rather than directly to a social relation, thereby problematising such a straightforward critical realist interpretation.

dialecticians similarly eschew Marx's key initial argument (e.g. Reuten, 1993; Reuten and Williams, 1989; see also below).

Marx continues:

This common 'something' cannot be either a geometrical, a chemical, or any other natural property of commodities. Such properties claim our attention only in so far as they affect the utility of those commodities, make them use-values. But the exchange of commodities is evidently an act characterised by a total abstraction from use-value. Then one use-value is just as good as another, provided only it be present in sufficient quantity ... As use-values, commodities are, above all, of different qualities, but as exchange-values they are merely different quantities, and consequently do not contain an atom of use-value.

If then we leave out of consideration the use-value of commodities, they have only one common property left, that of being products of labour. But even the product of labour itself has undergone a change in our hands. If we make abstraction from its use-value, we make abstraction at the same time from the material elements and shapes that make the product a use-value; we see in it no longer a table, a house, yarn, or any other useful thing. Its existence as a material thing is put out of sight. Neither can it any longer be regarded as the product of the labour of the joiner, the mason, the spinner, or of any other definite kind of productive labour. Along with the useful qualities of the products themselves, we put out of sight both the useful character of the various kinds of labour embodied in them, and the concrete forms of that labour; there is nothing left but what is common to them all; all are reduced to one and the same sort of labour, human labour in the abstract.

Let us now consider the residue of each of these products; it consists of the same unsubstantial reality in each, a mere congelation of homogeneous human labour, of labour-power expended without regard to the mode of its expenditure. All that these things now tell us is, that human labour-power has

been expended in their production, that human labour is embodied in them. When looked at as crystals of this social substance, common to them all, they are—Values. (Marx, 1998a, pp.56–8)

There are further curious turns of phrase on first reading of these paragraphs. In particular, there are references to ‘unsubstantial reality’, to ‘crystals’ of ‘social substance’ and to what Marx will soon stress is ‘abstract labour’. Once again there appears to be an invalid argument mixed in with the peculiar terminology. To call labour the *only* common ‘thing’ shared by commodities raises the obvious objection other common ‘things’ can be pointed out. What about scarcity, utility, being appropriated (Bohm-Bawerk, 1984, pp.74–5), simply existing on the planet, being under the stars, etc? (Kay, 1979, points out the latter examples if only for ridicule). What in any case has this ‘reductive abstraction’ got to do with reality? (Reuten, 1993, p.97) Again, even if one is sympathetic to Marx’s argument, it must be admitted, it would seem, that it is illegitimate for Marx to claim *necessity* for his conclusion. At best the conclusion is *plausible* though it is unlikely to be plausible to anyone with either minimal economics or philosophy training: in the former case, economic theory teaches that utility is the obvious common ‘thing’; in the latter case, the ‘logical’ error of claiming necessity where there is none would be overwhelming evidence of muddled thinking. Thus both Marx’s move from exchange value to some ‘third thing’ and his argument that this third thing is labour, i.e. two initial and seemingly crucial steps in order to establish his labour theory of value, appear to be quite weak.

Once more contemporary and Hegel-inspired systematic dialecticians echo, indeed reinforce, these criticisms. *None* of the contributors to Moseley (1993) – including systematic dialecticians such as Arthur, Murray, Reuten, Smith and Campbell – vindicates Marx’s claim of *necessity* for his early conclusion that labour is the substance of value (see Moseley, 1993, Introduction). As noted above Reuten (1993, p.97) specifically objects to the ‘reductive abstraction’ that Marx appears to have undertaken. Furthermore, some systematic dialecticians attempt to diagnose the problem that leads Marx into his alleged error. Arthur (1998) concludes that Marx is methodologically ‘confused’ especially regarding the relationship of Hegel’s method

to that employed by Marx. Reuten (1993, p.110; 2000) and Reuten and Williams (1989) suggest that Marx's reference to labour as the 'substance' of value 'embodied' in the product is symptomatic of Marx's alleged inability to free himself completely of the legacy of classical political economy. Thus Marx was unable to embrace a truly rigorous and Hegelian systematic dialectical exposition, on the view these authors.

Marx goes on, in the next but one paragraph, to make the quantitative dimension explicit:

A use-value, or useful article, therefore, has value only because human labour in the abstract has been embodied or materialised in it. How, then, is the magnitude of this value to be measured? Plainly, by the quantity of the value-creating substance, the labour, contained in the article. The quantity of labour, however, is measured by its duration, and labour-time in its turn finds its standard in weeks, days, and hours. (ibid., p.58)

Prima facie this paragraph, in conjunction with those cited above (where Marx states that the exchange relation between two commodities entails they contain a third thing – now established as value – in 'equal quantities', ibid., p.56), would seem to indicate unambiguously that Marx is attempting, amongst other things, to explain exchange ratios by relative labour times embodied (though many defenders of Marx have denied this, a recent example being Kliman, 2000, f.n. 7). This quantitative dimension to the labour theory of value invites the obvious criticism that it is empirically false. Certainly, labour time is an important contributor to the cost price of a commodity (through wages) but not, it seems evident, the *only* contributor; machines, land and entrepreneurship also appear to contribute, as contemporary economic theory recognises.¹⁰ Furthermore many things have a price which is clearly independent of labour time, e.g. non-produced commodities or works of art. Yet perhaps the most damning evidence is provided by Marx himself! In *Capital*, Volume 3, Marx

¹⁰ To say that contemporary economic theory 'recognises' the appearance that labour is not the only contributor to value is not to imply the truth of this appearance. Rather, it will be argued below that the appearance is illusory.

introduces the evident reality that different production processes entail different proportions between means of production used up and labour expended in production (different ‘compositions of capital’). On correcting for what appears to be an elementary error in Marx’s calculations (a failure to transform the input prices – Sweezy, 1968; Meek, 1956) it becomes plain that this fact alone, even excluding all above mentioned factors and reducing means of production to ‘dated labour’, is enough to ensure that relative prices will necessarily deviate from relative labour times. Contemporary and Hegel inspired systematic dialecticians do not, in general, concur with these criticisms of Marx. The criticisms will be addressed in chapter 7 below as a development of the argument within this chapter.

All in all, there is an extremely powerful argument, on both ‘logical’ and empirical grounds, that the labour theory of value is wrong. This power serves as one important and straightforward explanation for the *prima facie* curious fact, mentioned in the introduction to this chapter, that the theory is in general disrepute. The argument has further and wider implications. If the argument were accepted then the only curiosity would be that the labour theory of value ever became popular to begin with and, further, that Marx did not recognise the problem and abandon the theory. Possible explanations might be the theoretical infancy of economic theory in Marx’s lifetime and / or Marx’s alleged normative prejudices and / or Marx’s alleged mathematical incompetence. Whatever the explanation for Marx’s apparent error, acceptance of the argument would entail that a true Marxist today should recognise Marx’s limitations and abandon the labour theory of value, whilst retaining all the deep insights that Marx provides. These insights, on acceptance of the argument, can only be strengthened by being freed from an outmoded and deeply flawed theory of value.¹¹

¹¹ The early history of the Conference of Socialist Economists witnessed debate around just these themes, with Steedman (1977) and Hodgson (1974) articulating most fully the (‘left neo-Ricardian’) case against Marx’s labour theory of value. See Clarke (1980) and Fine and Harris (1979) for ‘eye-witness’ accounts of, and contributions to, these debates; Mohun (2000) provides a useful perspective from the point of view of current developments in Marxist economics. In these debates the economics / sociology, quantity / quality splits were also in evidence (ibid.)

Marx's Labour Theory of Value

This section interprets Marx's key initial arguments regarding value as a development of 'materialist dialectics' for the capitalist mode of production – 'materialist dialectics' having already been argued to be the only philosophy that avoids scepticism in the previous chapters. The interpretation is advanced via a critique of contemporary and Hegel inspired systematic dialectics which, as shown above, opposes Marx's initial arguments on value. Systematic dialectics draws upon a sophisticated version of 'value form theory'¹² and the critique of systematic dialectics below is, if accepted, an essential addition to existing critiques of value form theory,¹³ through its novel deployment of Ilyenkov's materialist dialectics and corresponding novel interpretation of Marx's initial arguments regarding value. An affirmation of Marx's labour theory of value, as the fundamental basis for the study of contemporary society, is argued to flow from this interpretation.

Firstly materialist dialectics will be summarised. Secondly Marx's initial arguments regarding value will be considered in turn: his choice of starting point, his argument that a 'third thing' must underlie exchange value and his argument that labour must be the 'third thing' will be vindicated. The idealist deficiencies of contemporary and Hegel inspired systematic dialectics will be critiqued at each stage.

Materialist Dialectics and the Labour Theory of Value

Elson (1979, p.123) approvingly cites Marx thus:

[A]s individuals express their life, so they are. What they are therefore coincides with their production, both *what* they produce and *how* they produce. (Marx and Engels, 1998, p.62)

¹² Taylor (2000) provides a clear presentation of value form theory and of Hegel inspired systematic dialectics. Important examples of value form theory, in addition to the systematic dialecticians focused upon in this chapter, include Backhaus (1974), de Brunhoff (e.g. 1978), Eldred (1984), Eldred and Hanlon (1981), Lipietz (1985) and de Vroey (e.g. 1982).

Thus Elson affirms the well recognised fact that Marx's *Capital*, including therefore his labour theory of value, was developed in the context of a 'materialist conception of history' (Marx, 1987; Marx and Engels, 1998; for an opposing view see Gunn, 1992 and Negri, 1991). This context is registered in the very first line of the first chapter of *Capital* where Marx uses the unexplained term 'mode of production' (cited above). More controversially, given the current general antipathy towards dialectics in general and 'dialectical materialism' in particular (an understandable antipathy due to the Stalinist appropriation of the term), it is affirmed below, following Ilyenkov (1977; 1982), that Marx's was a materialist *dialectics*. Marx's approval of Engels' dialectical materialism (expressed in *Anti-Duhring* and *Dialectics of Nature*), and Marx's well known view that Hegelian dialectics needed inverting from idealism to materialism (Marx, 1998a, p.36) support this view.

Elson (1979), as is also fairly typical of literature on the labour theory of value, makes no sustained attempt to articulate the meaning of the 'materialist conception of history' even as she invokes its fundamental importance. Rather, she argues that *Capital* is about the determination of 'labour' in the current epoch without any further detail on just what 'labour' is or what it implies, other than a few sparse and unsupported quotes from the *German Ideology*. Elson is, of course, justified in abstracting from such concerns (due simply to constraints of time, space and the need for clarity) but this does not mean that they are unimportant. A fuller picture of Marx's labour theory of value can be achieved by incorporating a clear conception of labour at the highly abstract, transhistorical level. Indeed, the relevance of such a conception to the labour theory of value and so to *Capital* has motivated the earlier chapters of the present study and will be illustrated below.¹⁴

¹⁴ Rubin (1982, p.1), writing in Russia during the 1920s, notes that, from Hilferding onwards, there had been a recognition of the importance of Marx's transhistorical concept of labour for the comprehension Marx's labour theory of value. Rubin himself provides his own elaborate interpretation of this concept, to be considered below. This tradition was, of course, interrupted by the Soviet authorities – Rubin himself was arrested in 1930, then exiled and eventually killed (ibid., p.xxxx).

Marx and Engel's 'new materialism' (1998, p.170), or 'materialist dialectics', as interpreted by Ilyenkov (1977, 1982; see chapter 4 above) can be summarised via Marx's 'Theses on Feuerbach', especially Thesis 1 and Thesis 10 (Marx and Engels, 1998, pp. 167–70):

The chief defect of all hitherto existing materialism (that of Feuerbach included) is that the thing, reality, sensuousness, is conceived only in the form of the *object or of contemplation*, but not as *sensuous human activity, practice*, not subjectively. Hence, in contradistinction to materialism, the *active* side was developed abstractly by idealism—which, of course, does not know real, sensuous activity as such. Feuerbach wants sensuous objects, really distinct from the thought objects, but he does not conceive human activity itself as *objective* activity. Hence, in *Das Wesen des Christenthums*, he regards the theoretical attitude as the only genuinely human attitude, while practice is conceived and fixed only in its dirty-judaical manifestation. Hence he does not grasp the significance of 'revolutionary', of 'practical-critical', activity.

(Thesis 1)

The standpoint of the old materialism is civil society; the standpoint of the new is human society, or social humanity. (Thesis 10)

Three key distinctions are made here.¹⁵ Firstly there is 'old materialism'. Of modern philosophers, this characterises most obviously Locke (but Hume and Berkeley show where Locke's static materialism logically ends). Locke recognises that there are real material objects, external to the mind, that the mind must grasp, but he does not recognise the philosophical significance of the transformation of these objects by human labour. Rather, for Locke, humanity is considered passively to contemplate an external material world. On Ilyenkov's conception Spinoza had, prior to Marx and Engels, reached furthest in comprehending the material activity of thinking beings (so

¹⁵ The discussion that follows draws upon Ilyenkov (1977) and chapters 3–5 above.

overcoming Humean scepticism) but still could only see this activity as *accommodating* nature, rather than transforming it.

Secondly there is idealism, most importantly 'clever' idealism as Lenin described it (cited in Iyankov, 1977, p.254), the culmination of which is Hegel's philosophy. In this case the dynamism, the transformative activity of the subject, is recognised, as captured fully in Hegel's notion of the 'Idea' (cf. Marx, 1998a, p.36). Hegel inevitably expounded dialectics because dynamism, interrelations and development are themes that only a *dialectical* logic can grasp (Pilling, 1980, p.137, citing Lenin, 1972, pp.259–60). However, Hegel cannot, ultimately, sustain the mind-independent material world so, in this respect, idealism is more profoundly wrong than the old materialism and Hegel's is an idealist dialectic.

Thirdly there is the new materialism, or materialist dialectics. In this case dialectical logic is retained, there is a philosophy of motion, of dynamism, interrelations and development, but now this is put on a materialist basis. This means, firstly, that the material world is recognised as dynamic, interrelated and developing, so that matter can be more precisely grasped, at the most simple and abstract level, as 'matter-in-motion'.¹⁶ Secondly humanity, or any other body that has reached the same or greater level of complexity as humanity, is grasped as the most developed form of matter (nature). Through labour, humanity (or any like body) transforms both nature and itself. In this way nature self-transforms through the labour of one of its own bodies (the human body, or any like body). It must be stressed that 'labour' refers not just to human labour. Rather, it refers to any material body that has attained the level of complexity to transform the rest of nature, and itself, according to its own (developing) wants and needs.

The retention of dynamism, interrelations and development but now on a materialist rather than idealist basis, implies that dialectical logic is preserved but now, likewise, on a materialist rather than (Hegelian) idealist basis. The crucial feature of dialectics is the stress on interrelations and development, which, in the case at hand, will be

¹⁶ Engels (1998, p.74) states that 'motion is the *mode of existence* of matter'.

seen to entail the development of the 'law of value' (from 'abstract' to 'concrete'). Amongst the current literature on Marx's method, contemporary and Hegel-inspired systematic dialectics has articulated the notion of developing a comprehension of capitalism systematically from abstract to concrete with great clarity (see chapter 5 above). However, as noted in the previous section above, Marx's theory of value has been judged defective by systematic dialecticians, perhaps due to Marx's alleged incomplete break with classical political economy and consequent retention of a 'physical substance-embodiment metaphor' (Reuten, 1993, p.110). The perspective of materialist dialectics suggests, to the contrary, that Hegel-inspired systematic dialecticians fail to interpret Marx's theory of value correctly due to their idealism, their adherence to an idealist rather than materialist dialectics. According to the interpretation of Marx's argument below, materialist dialectics is able to vindicate Marx's key initial arguments regarding value and thereby demonstrate that Hegel-inspired systematic dialecticians cannot comprehend value and hence cannot grasp capitalism due to their idealism.

It can first be noted that, *contra* the initial appearances outlined in the previous section, Marx himself was, well before he came to write *Capital*, keenly aware of the major 'problems' with the labour theory of value though he did not see them as such. As argued below Marx had no truck with the idle and empty 'logic' that would deny the very existence of value (a logic characteristic of the 'vulgar economy' of his day). On the other hand, Marx well recognised the importance of the apparent concrete falsehood of the labour theory of value. Ricardo, who was much admired by Marx,¹⁷ had long since articulated what is, in essence, the 'transformation problem' as described above and Ricardo's critics, chief amongst them Malthus, had used it against Ricardo to powerful effect, opening the theoretical way for 'vulgar economy' (Pilling, 1980; Clarke, 1982; Fine, 1980). For Marx, this *concrete* false appearance of an *abstract* truth indicated a contradiction to be embraced and developed (sublated) – in other words to be explained or theorised. It was an example of Marx's dictum that 'all science would be superfluous if the outer appearances of things coincided with

¹⁷ Marx considered Smith and Ricardo the 'best representatives' of classical political economy (Marx, 1998a, p.116, n. 1).

their inner essence' (Marx, 1998b, p.1095). Marx not only recognised incongruity of the labour theory of value with concrete appearances, he comprehended why this was, for Ricardo's theory, an insoluble problem.¹⁸ For, Ricardo had no conception of 'developing' theory from abstract to concrete. As Marx puts it:

Here [for Ricardo] the contradiction between the general law and further *developments* in the concrete circumstances is to be resolved not by the discovery of the connecting links but by directly subordinating and immediately adapting the concrete to the abstract... (Marx, 1972, p.87–8, emphasis added, cited in Pilling, op. cit., p.31 and in Ilyenkov, op. cit., p.326)

A materialist dialectic interpretation of Marx's *development* of the law of value, his tracing of the 'connecting links' between the abstract labour theory of value (which Marx always referred to the 'law of value') and its concrete developments, so as to comprehend the essential features of capitalistic society, is presented below. The subsequent chapter will trace Marx's further developments regarding value-form, exploitation and the transformation of value into price of production.

The Starting Point of Marx's Argument in 'Capital'

Marx's starting point for comprehending (presenting) the capitalist mode of production is the commodity as the elementary form of capitalistic wealth (Marx, 1998a, p.53, cited above). The precise status of this 'commodity' with which Marx begins is important. In examining the commodity, Marx is abstracting out the most common appearance of the product of labour under capitalism. Here the term 'appearance' refers to the consciousness, to the (everyday) experience of people within capitalist society. Of course, people experience many individual and particular things. The commodity that is Marx's starting point is an abstraction from nearly all of these particularities to leave only the *characteristic form* taken by the product under capitalism. What is this? The commodity as a thing that is both a use value and

¹⁸ Ricardo's problem was, according to Marx, 'much more difficult to solve than that of squaring the circle which can be solved algebraically. It is simply an attempt to present that which does not exist as in fact existing' (Marx, 1972, p.87, cited in Pilling, 1980, p.30 and in Ilyenkov, 1977, p.325).

an exchange value. Whatever the particular characteristics of any individual commodity, it has this two-fold character.

Materialist dialectics indicates that Marx is interested in the specific mode of production, hence the specific form of labour within capitalism. The fact that Marx begins with the product (the commodity), rather than the production process, indicates that, in order to comprehend the capitalistic production process, it is first necessary to comprehend the peculiar nature of the capitalist commodity, this is indicated by Marx:

The value-form of the product of labour is not only the most abstract, but is also the most universal form, taken by the product in bourgeois production and stamps that production as a particular species of social production, and thereby gives it its special historical character. (Marx, 1998a, p.117)

The systematic dialectical aspect of Marx's work entails that he has already gone through an entire method of enquiry in order to reach this, the most simple and abstract 'cell-form' of capitalism and starting point of the method of presentation (see previous chapters; Marx, 1973, pp.81–111; Echeverria, 1978; for an opposing view, Carver, 1980). The method of enquiry entailed the philosophical development of materialist dialectics itself (see references to Marx's earlier work given above) along with the systematic study (appropriation) of human history, the attempts to comprehend that history and to comprehend the current socio-economic conjuncture, including, most importantly, the work of the classical political economists. Foremost amongst the latter were Adam Smith and David Ricardo. These political economists were materialists who advocated and developed the labour theory of value, in doing so uncovering its problems (leading Smith to reject the theory) as outlined above (Clarke, 1982; Dobb, 1973; Fine, 1982; 1996; Pilling, 1980).

Though there are many similarities between Hegel inspired systematic dialectics and materialist dialectics regarding both the method of enquiry and the starting point, there are important differences. Reuten (1993, p.96) sums up these differences very clearly:

Is this, the commodity, the most abstract all-embracing concept for the capitalist mode of production? I doubt it. For example, does it embrace in itself a notion of the activity of the creation of useful objects in capitalist form?

For Reuten, and other such systematic dialecticians, the starting point should be an 'abstract universal notion', embracing all the particulars, if only abstractly. The 'commodity' with which Marx begins does not do this because (to answer Reuten's rhetorical question) it does not embrace 'within itself' the notion of production. For Reuten, this is evidence for the suggestion that Marx has not broken sufficiently from the method of classical political economy. However, a simpler interpretation is that Marx's materialist dialectics is different to contemporary and Hegel-inspired systematic dialectics. Marx's materialist dialectics is *rooted in the characteristic and dominant 'appearance forms' of ongoing day to day contemporary social production and social life*. In our ongoing day to day activity we continually encounter commodities, amongst many other particular and individual things. As noted above, Marx starts with this characteristic form of the product, the commodity as such, abstracting from all other aspects encountered. Later in the presentation Marx will introduce further 'forms', i.e. further experiences and activities dominant in the day to day life of individuals within capitalism. In particular he will 'derive' the form of simple circulation (C-M-C) and then introduce the form of capital (M-C-M'). On the interpretation offered here, Marx's key conclusions rest on the firmest of foundations, for they rest on nothing more than the indisputable presence of these manifest forms, these ongoing experiences and activities which are so common that they are seldom rigorously problematised at all. Marx does no more than comprehend the nature of these forms, uncovering the relations of production, the specific society that their prevalence necessarily (*tautologically*) implies.¹⁹

¹⁹ Ilyenkov appears to predict Reuten's Hegel-inspired criticism of Marx, cited above. According to Ilyenkov (1982, p.83), '[a] Hegel adept would say about the first sections of *Capital* that definitions of one particular form of value are there taken to be universal definitions of value, while they are not universal definitions at all'. In opposition to such a view, Ilyenkov argues that, according to materialist dialectics, 'direct commodity exchange ... [is]... a phenomenon in considering which one may obtain a universal definition of value' (ibid.). The above interpretation of Marx's starting point concurs also with Lenin (1972, pp.360-61, cited approvingly both by Ilyenkov, ibid., p.85, and

The Existence of the 'Third Thing'

Thus far, it has been argued that the standpoint of materialist dialectics is able to make sense of Marx's starting point and aims. But what of the powerful arguments against the labour theory of value? As described above, Marx moves on to argue that a third thing must underlie the exchange value of the commodity. The first charge laid against the theory, recounted above, concerned the point that it is both 'logically' and 'naturally' possible for commodities to have (many) exchange value(s) without any underlying common substance. From the standpoint of materialist dialectics such an empty 'logic' simply displays its irrelevance in this instance. On the materialist dialectical view it is an absolute material necessity for common powers to be underlain by a common material form. According to the materialist argument objects are specific forms of matter. Matter is inherently in motion; it is matter-in-motion. An object, or specific form of matter, is therefore the unity of a specific form of motion and a specific spatial form. The powers or 'ways of acting' of an object, its motion, are in unity with its spatial attributes. This is not so much a profound philosophical principle as a statement of the obvious: powers do not spring up on their own, rather they are inherent expressions of definite forms of matter.²⁰

In the case at hand, commodities must be underlain by a common and determinate material property enabling their common power, or way of acting, of 'exchangeability' in definite proportions. This common property must be 'determinate'²¹ which means that the variations in the *particular form* taken by the

Saad-Filho, 2002, p.113): 'Marx first analyses the simplest, most ordinary and fundamental, most common and everyday *relation* of bourgeois (commodity) society, a relation encountered billions of times, viz. the exchange of commodities. In this very simple phenomenon (in this "cell" of bourgeois society) analysis reveals *all* the contradictions (or the germs of *all* the contradictions) of modern society'. On the surface, there is some resonance of this view with the critical realist notion of founding social science upon 'demi-regularities', in this case the 'demi-regularity' of commodity exchange. However, the critical realist view utterly fails to register the synthetic side to abstraction (in this case, the abstraction of the commodity), so the appearance of resonance is illusory. See chapter 5 above and Brown, Slater and Spencer (forthcoming).

²⁰ This statement is a basic summary of the relevant aspects of Ilyenkov's Spinozist based materialist dialectics (see chapter 4 above). Prevalent views within contemporary philosophy and prevalent contemporary interpretations of Marx do not affirm the statement.

²¹ The notion of 'determinate' abstraction used here adapts the straightforward distinction between 'determinate' and 'determinable' abstraction employed by Dancy (1987, ch. 3) in the course of his

property in each respective commodity (e.g. the *particular* respective length or weight or age of each commodity) must be systematically related to the corresponding respective exchange values of each commodity. The circumstance that each commodity has length *as such* is not, for example, enough to suggest that length is the sought after 'third thing' underlying exchange value. Only if variations in exchange value were systematically related to variations in the length of the commodity could length be the common material form. A relationship of *proportionality* between the magnitude of the underlying material property and the magnitude of exchange value is the simplest possible systematic relationship that may obtain but proportionality is not necessary. All that is necessary, according to the materialist argument, is that *some or other* systematic relationship obtains between the underlying determinate material property and the magnitude of exchange value. This is because matter exists only in particular forms so that to abstract from all such forms (to have no systematic relationship any such form) is to abstract from (have no systematic relationship with) matter itself.²² Such an abstraction is precisely what materialism forbids.²³

interpretation of Berkeley's critique of Locke. There are a number of more complex definitions of the term within the literature on value (e.g. Gunn, 1992, and Murray, 1988). The precise way in which Dancy's distinction has been 'adapted' will be indicated below.

²² It can now be seen how Dancy's (1987, ch. 3) straightforward notion of 'determinate abstraction' has been adapted in the above discussion. For Dancy, abstraction is a mental operation – particulars are 'abstracted from' in thought. In the above discussion, however, to 'abstract from' means to 'have no systematic relationship with' – thus this notion refers to a relationship that holds in immediate reality, rather than to a mental operation. In the literature on value this has sometimes been called 'real' (e.g. Arthur, 2001) or 'actual' (e.g. Reuten and Williams, 1989) abstraction.

²³ Like Marx, Ilyenkov (1977; 1982) does not spell out in such explicit detail the line of reasoning made explicit above with regard to exchange value, no doubt because it is, for a materialist, a statement of the obvious. In the course of his discussion of the relationship between thought and being, however, Ilyenkov does make explicit the same mode of argument. Ilyenkov cites Marx: 'What is the distance between the syllable A and a table? The question would be nonsensical. In speaking of the distance of two things we speak of their difference in space ... Thus we equalise them as being both existences of space, and only after having equalised them *sub specie spatii* [under the aspect of space], we distinguish them as different points of space. To belong to space is their unity' (Marx, 1971, p.142). Ilyenkov expands upon Marx's point: '[i]n other words, when we wish to establish a relation of some sort between two objects we always compare not the "specific" qualities that make one object "syllable A" and the other a "table", "steak", or a "square", but only those qualities that express a third something, different from their existence as the things enumerated. The things compared are regarded as different modifications of this "third" property common to them all, inherent in them as it were. So if there is no "third" in the nature of the two things common to them both, the very differences between them become quite senseless' (Ilyenkov, 1977, p.18). In the case at hand, the intelligibility of the exchange relation of commodities requires

On the interpretation offered here, Marx's argument takes for granted this, to him, patently obvious materialist principle (in previous chapters, above, it was argued that the only alternative is a collapse to Humean scepticism).²⁴ This materialism is indicated at the outset (the reference to 'mode of production' cited above) and suffuses the whole of *Capital*. What Marx is interested in bringing out, in the paragraphs under discussion, is how this common property is 'contained' in a commodity only to be manifested or to appear as exchange value. The commodity appears as something with *an* exchange value. But, as Marx points out, in actual fact, the commodity has as many exchange values as there are other types of commodity. Reference to 'the' value of the commodity must in fact be reference to something inherent in the commodity, rather than being shorthand for 'exchange value'. The notion of *the* value of a commodity is then either a misnomer (as Bailey argued) or, given the above argument, it is an unwitting reference to the common material property that underpins exchange value (whatever this 'third thing' may be).

Systematic dialecticians do not recognise the materialist principle articulated above. This is demonstrated starkly by Arthur (personal communication), who comments on this argument directly:

a 'third thing' as which they can be compared and materialism requires that this 'third thing' is material.

²⁴ Rubin interprets the argument for a 'third thing' as follows: '[L]et us take exchange in the form in which it actually takes place in a commodity economy. Then we will see that every object can be equalised with all other objects. In other words, we see an infinity of proportions of exchange of the given products with others. But these proportions of exchange are not accidental; they are regular and their regularity is determined by causes which lie in the production process. Thus we reach the conclusion that the value of a quarter of wheat is expressed once in two pounds of coffee, another time in three chairs, and so on, independently of the fact that the value of a quarter of wheat has remained the same in all these cases. If we assumed that in each of the infinite proportions of exchange, the quarter of wheat has another value (and this is what Bailey's statement can be reduced to), then we would admit complete chaos in the phenomenon of price formation, in the grandiose phenomenon of the exchange of products by means of which the comprehensive interrelation of all forms of labour is carried out' (Rubin, 1982, p.110). Rubin is correct in noting that, unless 'value' (the 'third thing') exists no explanation of exchange would be possible; complete chaos, or at least, complete unintelligibility would ensue. This is precisely what the materialist conception of matter-in-motion (more complexly, the notion that powers are expressions of material forms) recognises. The materialist dialectic conception goes much further, in that it coherently applies that principle of 'intelligibility' to all things, and recognises that the only 'alternative' is (Humean) irrationality.

I see know reason why an artificial form thrown up in exchange necessarily has a common substance. The supposed 'power' of exchangeability would be a fetish imputed on the basis of what exchangers do.

It is important to consider carefully the implications of this, at first sight, quite plausible comment. In essence the comment implies that society is able to create systematically ('throw up') something (a 'form') that has no necessary relation to matter. This further implies that society is able systematically to create something that *abstracts entirely from (is entirely unrelated to) material production*. Arthur's view expresses precisely *idealism* according to the materialist philosophy advocated within this chapter and within this thesis overall. Indeed, in the history of philosophy the paradigmatic case of a 'thing' which abstracts entirely from matter is precisely the *ideal*, or 'mind', and the paradigmatic argument in favour of such a 'substance' is that offered by Descartes (see chapter 4 above). These issues will be discussed further below.

The Identification of Congealed Abstract Labour as the 'Third Thing'

The second major criticism of Marx's logic raised above concerned his argument that labour was the only common property contained in all commodities, when there would appear to be other candidates. As argued above, Marx is not searching for just any old predicate applicable to all commodities; he is not following a formal logic. Nor does he hold a typical interpretation of the laws of nature, whereby 'powers' can spring up on their own. Rather, the only 'thing' that will count for Marx is a common determinate material property to which the power in question – quantitatively determinate universal exchangeability – is tied. The various suggested alternative 'common properties' (ignoring the ridiculous) – utility, scarcity, being appropriated – refer to relations that the commodity enters into as a *use value*. Thus commodities confer utility to people as use values. A commodity is scarce in so far as there are people who want, but are unable, to use (consume) it. Commodities are appropriated for use (consumption). However, Marx notes that 'the exchange of commodities is

evidently an act characterised by total abstraction²⁵ from use-value' (Marx, 1998a, p.57). This means, firstly, that those properties common to all commodities as use values – mass, height, age, etc. – have no systematic relationship with exchange value, hence cannot be the sought after third thing (common property). Secondly the diverse material forms that constitute different commodities, giving them their specific use are, by definition, not common to all commodities.

The complete abstraction from the commodity as a use value in exchange must immediately strike a materialist as contradictory. For, it would appear that exchange value does after all abstract entirely from all determinate material properties of the commodity and thereby that exchange value falsifies the materialist principle that powers are tied to determinate material properties. Marx, on noting this apparent feature of commodities as exchange values, is therefore keen to stress and to explain this 'ghostly' nature of value. Contemporary and Hegel-inspired systematic dialecticians also stress this feature.²⁶ There are, however, two crucial respects in which these systematic dialecticians differ from Marx and materialist dialectics. Firstly the abstraction from *natural* matter in exchange suggests the need to invoke the existence of a *new* 'substance' different from natural matter, just as Descartes invokes the new substance, 'mind', on finding it impossible to explain the behaviour of thinking beings in terms of matter (see chapter 4 above). Thus, having discussed the abstraction from use value in exchange, Marx characterises the third 'thing' underlying exchange value as a common 'substance' (Marx, 1998a, pp.56–8, cited above). Hence Marx's use of the term 'substance' is philosophically precise, rather than being, as Reuten (1993) and Reuten and Williams (1989) argue, a mistaken 'metaphor' to be explained by Marx's alleged inability to rid himself of the outmoded problematic of classical political economy.²⁷

²⁵ In the terminology discussed above this is an example of a 'real' or 'actual' abstraction.

²⁶ Arthur (2002) argues that value is 'spectral' in nature, drawing upon copious citations from Marx. Reuten and Williams (1989) refer to value as a 'pure form' that is as abstract as time and space.

²⁷ Murray (1993, p.49) suggests that Marx's discussion of abstraction in exchange is purposefully redolent of Descartes' famous discussion of wax in the *Meditations* (Descartes, 1980, pp.64–7). However, the interpretation above emphasises the importance of the *disanalogy* between Descartes' discussion of wax and Marx's discussion of exchange value. For Descartes, 'all observed phenomena', including therefore wax, can be 'explained by ... the size and shape of the various particles into which... [matter] ...is divided' (Cottingham, 1995, p.190). This is why the 'substance'

Secondly, unlike contemporary and Hegel-inspired systematic dialectics, Marx's materialism requires that there *must* be a material form underlying exchange value, despite the 'spectral' (ghostly) nature of value. In order to comprehend just what this 'common substance' is, it is necessary to recognise that, as argued in chapter 4, labour is the highest form of matter and reacts back upon other forms of matter in a process of self-development. The product is therefore an *embodiment* or *objectification* of human labour. This view is not a remnant of the outmoded problematic of classical political economy, as Reuten (1993) suggests, rather it is a feature of Marx's materialist dialectics. When considered as embodiments of labour, Marx notes that there *is* a *social* 'residue' (Marx, 1998a, p.57, cited above) left after abstraction from all *natural* material properties of the commodities in exchange, viz. congealed socially necessary labour. Marx's view is explained in detail in the paragraphs below. Prior to that discussion, it can be noted that Hegel-inspired systematic dialecticians *do* recognise, indeed stress, that value is socially specific. However, without the basic materialist principle that common powers are tied to common material forms, and without recognition of the commodity as an objectification of labour, Hegel-inspired systematic dialecticians see no reason to pursue Marx's argument regarding labour and labour time. They see no reason to search for a common material form underpinning exchange value, nor hope of finding such a common material form. For these and related reasons (some of which are recounted above) Hegel-inspired systematic dialecticians cannot validate Marx's argument regarding the substance of value and, instead, are left with the observation – utterly nonsensical from a materialist standpoint – that 'value' is 'pure form'.²⁸ On the interpretation offered within this chapter, idealism is the essential flaw from which the various defects of Hegel-inspired systematic dialectics, and more broadly of 'value form theory', should be derived.²⁹ Marx's view is explained below.

of wax is, for Descartes, not 'mind' but 'matter'. In contrast to Descartes' discussion of wax, Marx notes that exchange value *cannot* be explained by reference to natural matter and hence a *new* substance must be invoked. Marx's discussion parallels Descartes' discussion of 'thought' (ibid., p.191; see also chapter 4 above), rather than of wax.

²⁸ Likitkijsonboon (1995, pp.90–94) notes that the tendency to reduce value to 'pure form' is characteristic of the general strand in 'value form theory' that draws its inspiration from Rubin.

²⁹ Saad-Filho, 2002, ch. 2, summarises extant critiques of value form theory. One important facet of these critiques is that value form theory cannot explain the magnitude of value because it cannot

Just as commodities have a natural material commonality, just as they are all constituted by 'matter' (Spinoza's 'substance'), whatever the specific form of that matter, they also have the common material property of being products (hence embodiments) of labour. This second commonality is dependent on the first, since labour is itself a special form of matter able to creatively transform, so as to produce the diverse products here taking the form of commodities. As described above, exchange value completely abstracts from (has absolutely no systematic relation with) the natural material properties of the commodity. So value is a total abstraction from natural 'matter'. It would seem, then, that absolutely no material properties are left, even when commodities are considered as products of labour. For, each and every individual and particular property of labour must have been abstracted from in exchange. If exchange abstracts from (has no systematic relation with) size, weight, colour, etc., then it abstracts from (has no systematic relation with) the particular and individual labours that have produced and crafted these particular determinate properties. However, along with the universal attributes of *natural* matter (size, age, etc.), the products of labour in all *social* formations (whether or not the products predominantly take the form of commodities), have the property of requiring a definite quantity of social labour time. All societies must distribute labour in definite proportions, so that the necessary social labour time for production of items of material wealth must be determined and must take effect within any society. Unlike the natural material attributes, exchange value (the characteristic form of the product only of capitalistic society) does *not* utterly or palpably abstract from (lack any systematic relation with) social labour time necessary for production of the product, as discussed below.

There are, of course, many cases where a commodity's exchange value magnitude appears to have little relation to social labour time, e.g. antiques, memorabilia, cultivated land, not to mention those things that have no social labour time contained in them at all (e.g. uncultivated land). Furthermore, in most cases there

recognise the constitution of value (congealed abstract labour) in the sphere of production. See chapter 7 below.

appear to be other factors independently determining the magnitude of exchange value even if necessary labour time is one factor: examples are the rate of profit (apparently reflecting, amongst other things, the level of competitive pressure), the rate of interest and of tax (see section 1 above). However, these various apparent differences between the relative magnitudes of social labour time and of exchange value pale into insignificance relative to the total abstraction of all other determinate material properties from the commodity, in exchange. Specifically, this means that it is obviously impossible to establish a systematic relationship between exchange value magnitude and size, weight, age, etc. whereas such a relationship may obtain between exchange value magnitude and socially necessary labour time, though it is clearly not a proportional relationship. It was noted above that materialism requires only that there is *some* systematic relationship between exchange value and the underlying material property; this does not have to be a *proportional* relationship. Given that socially necessary labour time is the only possible candidate for such a relationship, it must be concluded, with Marx, that the property of being an embodiment of socially necessary labour of definite duration is the material property that underlies exchange value. The deviations from proportionality between social labour time and exchange value must be systematically accounted for through further theoretical development – this is the *quantitative* implication of Marx's stipulation that the law of value must be developed from abstract to concrete (e.g. Marx, 1972, pp.87–8, cited above).³⁰ Indeed, the fundamental reason for these infractions of proportionality is already contained within the basis established, as will be made clear below, after clarification of the argument thus far.

The starting point of the argument was the consideration of the commodity as the characteristic form of the product under capitalism. Examination of this form revealed that reference to the 'value' of the commodity is in fact reference to an inherent property of the commodity, rather than a shorthand for 'exchange value', the latter (exchange value) being merely the form of appearance of the former. This is

³⁰ If the arguments of this chapter were to be accepted then the explicit articulation of this quantitative implication above would constitute a significant contribution to the literature. The qualitative implications of Marx's argument (further discussed below) have been better recognised than the quantitative implication spelt out here (see for example the discussion of critical realism in section 1 above).

because a commodity has, in fact, many exchange values. Thus 'value' can be taken as the correct reference to this intrinsic property and 'exchange value' as the form through which value appears and takes effect. A complete abstraction from use value, hence from natural 'substance', has been revealed in considering the commodity as a value. The argument has uncovered social labour time necessary for production as the determinate property intrinsic to the commodity and manifested as exchange value. Further, it has been argued that the idealism of systematic dialectics explains systematic dialecticians' rejection of Marx's argument. For an idealist the fact that the magnitude of socially necessary labour time is the *only* material property, the only facet of material production (of 'the mode of production') that could possibly be systematically related to exchange is of no consequence, i.e. it cannot justify the labour theory of value.

Marx's materialist argument leads to curious conclusions regarding the 'substance' of value, regarding, in other words, that which socially necessary labour time is a quantity *of*, i.e. socially necessary labour. It is labour that is totally abstract, entirely devoid of any intrinsic objective material form, entirely divorced from natural substance. It must be an entirely *social* substance strangely devoid of inherent sensuousness, of any inherent objectivity (all of which has been abstracted from in exchange). Through being represented as exchange value it gains a sensuous form and establishes itself as a 'ghostly' object, as one side of the two-fold existence of the commodity. As the 'thing' that individuals within capitalist society call 'value'. It cannot be stressed too highly just how peculiar and contradictory this notion is. Value is *embodied* labour, yet the material *body* of the commodity has been abstracted from in exchange. In other words there is *embodiment* without a *body*! In order to characterise this absurd situation Marx (1998a, p.58, cited above) refers to value as 'congealed' abstract labour, a 'congelation' of abstract labour pure and simple. Abstract labour becomes a 'social substance' and gains effect 'congelated' as a separate side of the two-sided commodity, its 'value' as opposed to 'use value' side. Once again it must be noted that Marx's terminology is philosophically precise. Marx is not suffering from an inability to shake off the mindset of classical political

economy, nor is he wilfully contradicting himself. He is, instead, accurately characterising an ‘absurd’ reality.³¹

Thus the abstract nature of the labour that constitutes value fits exactly with Marx’s earlier stress that the ‘third thing’ – now recognised as value or congealed abstract labour – is ‘contained in’ a commodity, is ‘expressed by’, and gains ‘phenomenal form’ as exchange value. For labour in the abstract, independent of its individual and particular form, is not something that can be manifest immediately. A single commodity appears as a product of particular and individual labour. All such particular and individual labour does, of course, ‘contain’ those aspects that are common to labour as such, for these aspects are what give particular and individual labour its character as ‘labour’ in the first place. But such common features exist only as the particular and individual forms by which commodities are distinguished as use values. Exchange value is indeed necessary in order to provide the ‘form of manifestation’ of abstract labour, establishing the commodity as qualitatively identical to, but quantitatively divergent from, other commodities. Reflecting, thereby, the abstract labour contained in it (Marx, 1998a, chapter 1, section 3, analyses this process of value expression; see chapter 7 below).

Marx’s recognition of the abstract character of the labour constituting the substance of value, and thereby of exchange value as the appearance form of value, may sound like a technicality, a minutia. Yet, as Marx puts it, in the first Preface to *Capital*, the analysis of the value-form ‘does in fact deal with minutiae, but they are of the same order as those dealt with in microscopic anatomy’ (ibid., p.21). In fact, this recognition establishes, as classical political economy never could, firstly that value and exchange value are socially constituted (and constitutive) things: the labour that is stripped of individuality and particularity is purely social. Secondly, that generalised commodity production characterises a specific form of society, rather than just any society. It is a society where the social organisation of labour occurs only through indirect means, through purely social (neither individual nor particular)

³¹ This ‘absurdity’ is revealed starkly in the money-form of value and so it is this form that Marx (1998a, pp.109–10) refers to as ‘absurd’. See chapter 7 below for an interpretation of Marx’s development of value-forms.

labour gaining independent³² existence and effect through taking the appearance form of the exchange value of the product.

This development brings to the fore the specific fact that, under capitalism, social labour is only recognised as such in an indirect way. Whereas the social function of slaves, or of peasants, their respective organic relation to their respective social whole, was recognised by all members of the corresponding respective society, this direct recognition is absent in capitalism. Instead, the sociality of labour finds expression as 'value', whose sensuous form is 'exchange value'; an expression which, at first sight therefore, pertains to relations between things and not people. The most abstract reason why the magnitude of value, measured in labour time, must delimit the magnitude of exchange value thereby becomes apparent: a society where social labour is organised through, and appears as, exchange value can only self-reproduce and develop if socially necessary labour time quantitatively delimits exchange values. If this does not happen, if exchange value gives the wrong 'signals' vis-à-vis the allocation of labour, then not enough food, drink, shelter, etc., will be produced and distributed in order to sustain the members of society and it (the society) will collapse. To the extent, then, to which capitalism is an ongoing, self-reproducing society, socially necessary labour time must tether exchange value magnitude.

At the same time, the development brings out the most abstract reason why the magnitude of value, measured in labour time, will *not* be *precisely* proportional to the magnitude of exchange value, even as it is tethered by it. For, in this society there is no conscious control, or recognition, of the sociality of labour. The tethering of exchange value by labour time must occur by a social process which goes on 'behind the backs' (Marx, 1998a, p.66) of the individuals within the society. It must be the entirely unintended consequence of the actions of millions of people who have no direct recognition of social labour at all; where labour is undertaken privately, without direct social control, except through the discipline of exchange value.

³² This 'independence' is not absolute: if the material body of the commodity is destroyed than so is the value of the commodity.

Yet, at this abstract starting point, Marx is yet to determine what this social process is. He has not determined *how* value appears as, and quantitatively delimits (determines), exchange value. He has merely established, at the most abstract and simple level possible, what exchange value *is* (the appearance form of value), what the commodity as such *is* (the unity of use value and value), what value *is* (congealed socially necessary abstract labour) and what labour within capitalism *is* (concrete labour producing use value; abstract labour creating value). The ‘force [power] of abstraction’ (Marx, 1998a, p.21) thus uncovers the starting point for comprehending capitalist society, the labour theory of value. From this starting point, the apparent ‘things’ that constitute the ‘economy’, such as money, capital, wages, profit, interest and rent can, eventually, all be grasped as they truly are, i.e. as forms of social labour in a complex and peculiar system of social production. The specific social relations of production, entailed in the existence of value, can thus be grasped, in a step by step fashion. In this process of comprehension, the starting point is slowly developed, in thought, so that the economic categories (referred to above) are, one by one, comprehended *differently* to their immediate appearance. They are newly comprehended as aspects of the specific social whole, as particular forms taken by social labour.

Conclusion

Marx summarises succinctly the procedure advocated above, in response to scepticism regarding the labour theory of value, as follows.

Every child knows a nation which ceased to work, I will not say for a year, but even for a few weeks, would perish. Every child knows, too, that the masses of products corresponding to the different needs required different and quantitatively determined masses of the total labour of society. That this *necessity* of the *distribution* of social labour in definite proportions cannot possibly be done away with by a *particular form* of social production but can only change the *mode* of its *appearance*, is self-evident. No natural laws can be done away with. What can change in historically different circumstances is only the *form* in which these laws assert themselves. And the form in which

this proportional distribution of labour asserts itself, in the state of society where the interconnection of social labour is manifested in the *private exchange* of the individual products of labour, is precisely the *exchange value* of these products.

Science consists precisely in demonstrating *how* the law of value asserts itself. So that if one wanted at the very beginning to 'explain' all the phenomenon which seemingly contradict that law, one would have to present science before science. It is precisely Ricardo's [1951] mistake that in his first chapter on value he takes *as given* all possible and still to be developed categories in order to prove their conformity with the law of value. (Marx, 1988)

Even though the Marx's labour theory of value is based upon the most basic fact of contemporary society, the prevalence of the commodity, its implications for the contemporary social sciences are momentous. 'Economics' as the science of commodity, money, capital, wages, etc. cannot be a merely quantitative science, for its objects are nothing less than peculiar alien forms of social labour, of value, which is the specific defining feature of the contemporary social formation, of capitalism. Conversely 'sociology' and the other social sciences cannot be purely qualitative because the object, the contemporary social formation, is organised through this peculiar one-dimensional substance of value, pure abstract labour, congealed as one side of the 'commodity', varying only quantitatively. In short, social theory, the science of society, is ineluctably qualitative and quantitative, it must be based upon the labour theory of value, a unitary science, neither 'economics' nor 'sociology'. The contemporary disciplinary boundaries, through burying the labour theory of value, serve simply to distort the real relations of production upon which contemporary society is founded. It has been argued above that contemporary and Hegel-inspired systematic dialectics, whilst making great strides forward relative to critical realism, ultimately cannot grasp contemporary capitalism because it cannot penetrate beneath the *appearances* of value to its essence, congealed abstract labour. The idealism of systematic dialectics renders it unable to fathom the *meaning* of 'congealed abstract labour' let alone recommend basing social science upon this notion.

However, the argument thus far has remained at an incredibly abstract and simple level. Another reformulation of the objections to Marx's labour theory of value can be made at this abstract stage. For, it can be objected simply that Marx fails to show how the labour theory of value is substantiated; he fails to show how the socio-economic process embodies the reality of the labour theory of value. The 'transformation problem' can then be raised as 'proof' of this objection. Doesn't Marx's transformation procedure show, once Marx's mistakes are corrected, that the socio-economic process does *not* conform to the labour theory of value? That the magnitude of socially necessary labour time has nothing to do with (has no systematic relationship with) the magnitude of price? Hence, that exploitation, as supposedly demonstrated in Volume 1, is not established either? The proof of the pudding is in the eating and does Marx's pudding taste as good as he claims prior to serving it up? These questions are answered below.

Chapter 7. The Substantiation of the Labour Theory of Value: Value-Form, Exploitation and the Transformation Problem

Introduction

The arguments presented in chapter 6 above, important though they are, provide merely the starting point for grasping Marx's labour theory of value and for addressing the many debates regarding Marxian political economy. Controversy rages regarding, for example, the tendency of the rate of profit to fall, the transformation problem, simple and expanded reproduction, accumulation, wages, exploitation and the development of the value-form. The chief contribution of this chapter is to the theory of surplus value and exploitation. Drawing upon Ilyenkov's materialist dialectics, and on the arguments of chapter 6 above, a new perspective on the theory of surplus value will be offered. According to this perspective the theory of surplus value does not *rest upon* the labour theory of value as in traditional interpretations, rather the opposite is closer to the truth: the theory of surplus value is a crucial step in *substantiating* the labour theory of value. The argument will be contextualised by bringing out the necessary linkages between the abstract argument of chapter 6 above, the theory of surplus value, and the issues surrounding the interpretation of Volume 3 of *Capital*. The issue of the transformation problem will be taken up explicitly and it will be argued that there is no 'problem' with the transformation rather it is a *further substantiation* of the labour theory of value and surplus value. This argument is one made by Saad-Filho (1997b; 2002, ch. 7) and pioneered by Fine (1983). Indeed, the theory of surplus value put forward in this chapter is argued to be a 'deepening' of Fine and Saad-Filho's approach (not just to the transformation but to political economy more generally). The structure of the chapter is outlined below.

The first section discusses briefly Marx's lengthy development of the forms of value in *Capital*, Volume 1, chapter 3. There is no consensus in the literature regarding the interpretation of Marx's development. The section does not aim to resolve all the issues that the development raises, rather it aims to bring out some important themes that both develop the exposition in chapter 6 above and prepare the ground for the

presentation of the theory of exploitation that follows. On the basis established, the subsequent three sections present the key argument regarding the theory of surplus value. Firstly the precise nature of the initial definition of the ‘capital-form’, and hence of ‘surplus value’, is argued to be overlooked in much of the literature. A distinctive account of this nature (an interpretation of Marx, 1998a, chs 2–5) is presented developing previous themes. Secondly a correspondingly distinctive interpretation is put forward of Marx’s discussion of the ‘contradictions in the general formula of capital’, (ibid., chs 5–6). Thirdly the resolution of these contradiction in the theory of surplus value (exploitation) is detailed. The common notion that labour has a ‘special status’ vis-à-vis other inputs to production is developed in a new direction, drawing upon Ilyenkov’s account of labour. On the view advocated, the theory of surplus value does not ‘assume’ or ‘hypothesise’ the labour theory of value. Rather, the theory of surplus value is the crucial step in the *substantiation* of the labour theory of value. The penultimate section addresses the final key step in the substantiation of the labour theory of value, viz. the transformation from values to prices of production. Though the relevant literature is vast, the section is brief because it supports and develops Fine’s (1983, p.520) ‘astonishing’ claim that the literature has fundamentally misinterpreted Marx’s procedure, a claim that has since been developed by Saad-Filho (1997b; 2002, ch. 7). It is argued that the theory of surplus value developed in this chapter ‘deepens’ Fine and Saad-Filho’s interpretation, by firmly establishing the existence and causal status of surplus value. A final section concludes, drawing out the wider significance of the argument for social theory, drawing upon the example of the theory of economic crisis.

The Forms of Value and The Process of Circulation¹

Chapter 6 above stressed that Marx’s starting point for the presentation in *Capital* is the commodity as the characteristic and everyday ‘appearance form’ of the product under capitalism. From this is a starting point, rooted in everyday life and experience, ‘value’ as congealed socially necessary abstract labour was shown to be unearthed.

¹ This section is an interpretation of Marx (1998a, chapter 1, section 3).

Having unearthed the nature of value through analysis of the commodity, the next task is to show how value comes into existence, how the product of labour comes to be recognised as a commodity, as both a use value and a value (expressed by exchange value). This is a task undertaken in Marx's 'development' of the value-form. It is known from the outset of the development that value does appear through the exchange relation (that the commodity is recognised as a value). Therefore the development must progress, in thought (a dialecto-logical development), to the point where it is grasped *how* value, congealed abstract labour, gains existence and appearance as exchange value. Marx starts this development with the simplest possible way in which value can be 'expressed', termed the 'elementary commodity form'. He finds that the simplest value expression is 'inadequate'. This means that the expression does not successfully establish that the product is a value, and so there is a logical warrant to move to a more complex and concrete expression; an expression that may itself be inadequate. It is known that, in reality, the commodity is recognised as a value, so the step by step progression from an abstract and simple yet inadequate expression to, ultimately, the concrete, complex and fully adequate expression (which will turn out to be the money-form) is readily justified. It should be noted that the coming into being of money is a historical as well as logical process. The nexus of the logical and historical in the value-form development is an important issue, one that is integral to the value-form development *contra* the apparent view of many systematic dialecticians, but will not be addressed here.² There is space here only to pick out two crucial developments: firstly the 'elementary' commodity-form; secondly the money-form, along with the consideration of exchange (circulation) as an ongoing process.

The Elementary Commodity-Form

As in the case of the measurement of weight through a pair of scales, the value of a commodity is 'externally' measured and simultaneously expressed by an equivalent

² For examples of different positions regarding this issue see Arthur (1997), Fine and Lapavistas (2000), Likitkijsonboon (1995), Reuten and Williams (1989), Saad-Filho (2002, ch. 1) and Zeleny (1980). Ilyenkov (1977, Essay 8), in what can be considered one of the crowning achievements of his work, provides an interpretation of Marx's value-form development as part of an account of the most fundamental issue in philosophy, namely the relationship between matter and the ideal. If nothing else, Ilyenkov's account serves to highlight just how many deeply controversial issues must be addressed if the value-form development is to be grasped fully.

form, i.e. relative to another commodity that is equivalent, in value, to it. Unlike the case of weight, value exists only through such measurement (owing to its inherently non-sensuous nature). This measurement is not consciously performed but haphazardly, through an entire social process based upon private, individual decisions without conscious social co-ordination and having nothing to do with any conscious 'measuring' of value. Indeed, subsequent theoretical developments will demonstrate that conscious appearances appear to contradict the essential process of value measurement that is, in truth, occurring.

The elementary commodity-form (which can be denoted C-C) is the simplest possible form of value expression. Here one commodity expresses its value in one other commodity (this latter commodity is an exchange value of the former commodity). The former commodity expresses its value relatively hence is the 'relative' form of value; the latter commodity serves as equivalent so is the 'equivalent' form. Marx is keen to stress that all the fundamental features of the exchange relation as an expression of value, the 'whole mystery of the form of value' (Marx, 1998a, p.71) are present in this elementary form. This is stressed because further developments towards the complexities of reality reveal how the form of appearance of value becomes more and more bizarre, and more and more has the effect of concealing the true nature of value from the participants to exchange, even as it brings value into existence. The seed of this mystification, present in the elementary commodity-form, is that value cannot gain an objective (sensuous) appearance as it 'truly' is. Value is an abstraction from all determinate objective properties. Neither a definite height nor weight nor colour, it is congealed labour, in abstraction from all such objective determinate properties. Thus in the elementary form value, a non-sensuous 'thing', appears as a sensuous thing, as the body of the commodity serving as an equivalent. This need to be expressed *through something else*, through appearing as something *opposite* to itself, as something sensuous, despite being inherently non-sensuous, is the root of the mystification that value expression causes.³

³ This interpretation draws upon Murray (1993) who points out that the need for an 'essence' to appear as something other than itself is an aspect of Hegelian Essence logic.

The Money-Form and the Process of Circulation

The elementary form is very deficient as an expression of value because it does not express the generality of value. Value is expressed only in another individual and particular commodity so does not appear to be a general 'substance' contained in all commodities. Nor, therefore, does the notion of a 'value', attached to each individual and particular commodity, arise in the minds of the participants to exchange. The specific result, the culmination, of Marx's lengthy development of progressively more adequate forms of value is to establish that only through money, as measure of value and medium of exchange, does the notion arise in the consciousness of commodity owners that the commodities each have a value. Prior to this, e.g. without fully developed money, commodity owners see only many exchange values, thus the notion of a value, inherent in the commodity, is not yet fully developed because it does not fully appear.⁴

There are many important subtleties in Marx's discussion of money. Perhaps most importantly there is the peculiarity of social labour in the abstract gaining an appearance form, outside of individual and particular commodities, as the universal equivalent that is money. This means that an individual and particular commodity, the money commodity, has become the socially accepted form of purely abstract and general labour. The individuality and particularity of the money commodity counts only as the appearance form of abstract and general (universal) labour. Thus, the particular and individual here counts as a mere aspect of the universal. This is a precise reversal of the normal state of affairs where the universal is a mere aspect of the particular. (Marx, 1998a, pp.109–10). Crucially, Marx has shown that this peculiarity of money is a mere reflection, a consequence, of the very nature of the labour that is the substance of value. Money gives form to the value inherent in commodities. It (money) is necessary to the existence of value because the latter (value) is non-sensuous and in need of sensuous form. But money by no means *creates* value, rather money is a *consequence* of it. To put it another way: value and

⁴ Weeks (1981, pp.27–40) stresses the need for value to gain an objective appearance and he offers a brief but lucid account of Marx's value-form development.

money are necessarily tied to one another but the former dominates the latter, since the latter is the sensuous form of the former.

As noted in chapter 6 above, systematic dialecticians employment of 'value form theory' entails that they either deny that labour is the substance of value (Reuten, 1993; Reuten and Williams, 1989; Taylor, 2000) or suggest that the relationship between labour and value is 'incidental' for the value-form development (Arthur, 2001; personal communication). This is despite the argument, presented above, that the recognition of abstract labour as the substance of value is the *raison d'être* of Marx's development of the forms of value! The reason for the stance taken by systematic dialecticians is, according to the argument presented in chapter 6 above, their idealist standpoint whereby 'society' can 'throw up' 'forms' which abstract entirely from (have no systematic relation with) the process of material production, whereas this is impossible from a materialist perspective. Marx's stress on the elementary form of value can now be more fully appreciated. In the elementary form it is clear that the value, the congealed socially necessary abstract labour of the relative form, is the 'active' factor causing the exchange relation and reflecting itself in the equivalent. Money, despite (or because of) being the perfectly adequate form of value (fully expressing the independence and universality of value, i.e. of congealed abstract labour), is at the same time a mystifying form. For, it appears to individual participants to exchange that the substance of the money commodity itself is responsible for value. Rather than mere appearance form of value, the money commodity appears as inherent substance and originator of value. The true nature of reality is mystified through the bizarre inversions inherent in the money-form. Systematic dialectics and value form theory remain mystified because they do not penetrate beneath these forms to their essence, viz. congealed socially necessary abstract labour.

The Capital-Form⁵

Having grasped the forms of value, Marx moves on to consider a new and empirically given appearance form in the exchange process. This is the form of capital, initially denoted 'M-C-M'. It is on consideration of the capital-form and more specifically the resolution of the 'contradictions' within that form that Marx is led to develop the theory of surplus value. This is a theory of capitalistic exploitation. The exposition below stresses two crucial factors, the analytical significance of which has been overlooked in the contemporary literature.⁶ Firstly, building upon the interpretation developed thus far, Marx's exposition is rooted in the day to day activity and experience of individuals and the capital-form is one such experience. The specific, if apparently banal, fact about this experience, the significance of which has been overlooked is that, in the capital-form, money appears to make more money *through exchange*. Secondly, Marx's copious references to 'fresh' and 'new' labour have a significance for the theory of surplus value that is little recognised. Recognition of these two factors contributes towards the main argument of the chapter overall, viz. that the theory of surplus value is a key step in substantiating the labour theory of value, not a deduction resting upon the labour theory of value. This section will discuss the capital-form and some crucial presuppositions contained within that form. The subsequent two sections will present and resolve the contradictions in the capital-form.

Like the commodity with which Marx initially begins, the capital-form is an empirical given rather than being in any way derived.⁷ Though, having grasped the significance

⁵ This section draws upon Marx, 1998a, chapters 2–5.

⁶ This literature includes the 'traditional' and 'Sraffian' traditions, value form theory (including systematic dialectics), the 'new interpretation', the 'temporal single system interpretation' and 'open Marxism'. It also includes the interpretation pioneered by Fine (e.g. 1989) and Weeks (e.g. 1981), within the broad parameters of which this thesis is intended to fall (and to which this thesis is intended to 'deepen' – see below). For the most recent overviews and approaches, see Arthur (2001), Foley (2000), Saad-Filho (2002) and the symposium on Brenner and world crisis in *Historical Materialism*, issues 4–5, which illustrates various approaches 'in action', i.e. in the context of explaining a concrete historical conjuncture. The Appendix to this thesis reproduces the editorial introduction to the aforementioned symposium.

⁷ There is a debate as to whether or not Marx *should have* derived the capital-form. Saad-Filho (2002, ch. 1), drawing upon Rosenthal (1998), criticises systematic dialecticians on grounds that the latter illicitly aim to derive the capital-form. However, there is a danger of taking this argument too far. It is *vital* to recognise that the *prevalence* (as opposed to more or less fringe occurrence) of the

of the simple form of circulation, C-M-C, Marx is able to interpret this new capital-form, M-C-M, as a form of value, and so he has a basis to fathom its true significance. In other words simple circulation, C-M-C, is both logically and historically prior to the capital-form, M-C-M, and so simple circulation must be grasped before the capital-form is considered. Marx notes that the capital-form appears alongside the form of simple circulation in the capitalist mode of production. Indeed the generalised appearance of simple circulation is a more universal appearance than capital. In other words the C-M-C form occurs more often, and to more individuals, than does the experience of M-C-M. This is because the most general experience within capitalism is the selling of a special commodity, 'labour-power', for the purpose of purchasing consumer goods – a process taking the form of C-M-C (however, at this stage of the presentation the notion of labour-power has not been introduced).

Marx's discussion of the capital-form, M-C-M, is very keenly observed. Peculiarities are shown to abound in this form. For one thing, within this form, the individual starts with a sum of money rather than with a commodity. The commodity (C) serves only as an intermediary between the starting point and the end point of the capital-form (M). Therefore the fact that money is a mere form of the value that is inherent in commodities becomes even further obscured. Money, divorced from commodities, becomes the starting point and end point of exchange.

Another peculiarity is that the form M-C-M as such is irrational. It implies that an individual starts with a sum of money (M) and uses it to purchase commodities (C) with the sole intent of reselling these commodities for precisely the same sum of money with which the individual started! Therefore the capital-form must in fact be represented as M-C-M', where M' is greater than M. For, the only rational possibility, given the form, is that the individual must be aiming to achieve a greater sum of

form of simple circulation (C-M-C) within society necessarily implies the prevalence of the capital-form (M-C-M') within society; they are *mutual* conditions of existence. One can quite readily accept this proposition whilst simply introducing the capital-form as an empirical given, as does Marx (1998a, p245), who writes, '[h]ad we gone further, and inquired under what circumstances all, or even the majority of products take the form of commodities, we should have found that this can only happen with production of a very specific kind, capitalist production. Such an inquiry, however, would have been foreign to the analysis of commodities'.

money at the end of the process (M') than was possessed at the start of it (M). Yet this entails another peculiarity. The aim of the individual behind the capital-form (who is, by definition, the capitalist) does not have a limit. No matter what magnitude of M is possessed, there is always an even greater magnitude, an M' , conceivable. Moreover M' does not present itself as it is, as the initial sum of money (M) plus an increment (labelled dM and termed 'surplus value'). Instead, M' comes as a 'package' that is theoretically labelled M' but, as far as the capitalist is concerned, M' is just another M to start the process of 'buying to sell dearer' all over again. In this way the capitalist *qua* capitalist becomes a mere pawn of the capital-form. The form controls the individual, and not the reverse. Given the previous development of value, Marx accurately characterises this situation as one of apparent *self*-expansion of value. Through the capital-form, value grows in magnitude, of its own accord, individual capitalists becoming servants of value expansion, of capital, rather than the other way around.

From consideration of the peculiarities of the capital-form, Marx moves on to consider its contradictory aspects, to be resolved, it will later be revealed, through the grasping of the specifically capitalistic form of exploitation. Before presenting the interpretation of Marx's argument certain additional aspects of the capital-form and of the form of simple circulation that precedes it will be clarified below.

Simple Circulation and the Abstract Capital-Form: Some Important Observations

Through the development of the notion of simple circulation and of the capital-form thus far, important qualitative aspects of the capitalist mode of production have been comprehended. It remains the case however that the presentation is at an extremely abstract and simple level. This high level of abstraction is crucial because it underpins Marx's well known, if often misunderstood, notion of 'surplus value'. Why, for example, doesn't Marx call the increment in the sum of money that is the aim of the capital-form (dM) 'profit' rather than 'surplus value'? Because 'profit' (which itself has different forms) is not the only appearance of dM possible. Interest and rent are also ways in which dM can appear. In the case of interest, the capital-form is truncated to $M-M'$, i.e. the mediation of commodities (C) does not occur. But interest

is still a form of capital because it is still a form where an increasing sum of money is the outcome and aim of exchange; it still results in a dM, in this case having the specific label, 'interest'. Hence the term 'surplus value' is more general than the respective terms 'profit', 'interest' and 'rent'. All three of these latter forms (which themselves split into different categories) count equally as forms of surplus value. Examination of these particular and individual forms of surplus value is, and can only be, undertaken much later in the presentation (in Volume 3 of *Capital*).

The high level of abstraction carries the crucial implication that the presentation of the mechanism whereby the magnitude of relative prices is determined cannot be undertaken (again, this level of complexity is reached only by Volume 3). This is not only, nor even primarily, because the distribution of 'initial endowments', the nature of individual tastes and the technical determinations of the production process have yet to be considered (these factors are the key exogenous variables in the general equilibrium analysis characteristic of mainstream economics). Fundamentally the mechanism(s) determining relative price magnitudes cannot yet be presented because, in order to grasp the mechanism(s), it is necessary to introduce the specific forms of surplus value that enter the consciousness of individual capitalist. First and foremost it is necessary to introduce 'industrial profit' which drives industrial production. Without first having introduced this 'profit motive' the process of competition, which is the enforcer of relative prices, cannot be considered at all.⁸

⁸ The process of competition is so important that Marx does mention it in Volume 1, but each time he does so he adds a rider, that indicates precisely the point being made above. Firstly, on the introduction of the notion of relative surplus value (which is in fact a process outwardly driven by competition) Marx writes, 'it is not our intention to consider, here, the way in which the laws, immanent in capitalist production, manifest themselves in the movements of individual masses of capital, where they assert themselves as coercive laws of competition, and are brought home to the mind and consciousness of the individual capitalist as the directing motives of his operations. But this much is clear; a scientific analysis of competition is not possible, before we have a conception of the inner nature of capital, just as the apparent motions of the heavenly bodies are not intelligible to any but him, who is acquainted with their real motions, motions which are not directly perceptible by the senses. Nevertheless, for the better comprehension of the production of relative surplus-value, we may add the following remarks, in which we assume nothing more than the results we have already obtained...' (Marx, 1998a, p.454). Secondly, in considering centralisation (again, a process outwardly driven by competition) Marx writes, 'the laws of this centralisation of capitals, or of the attraction of capital by capital, cannot be developed here. A brief hint at a few facts must suffice. The battle of competition is fought by...' (Marx, 1998a, p.898).

A further implication of the high level of abstraction, at the introduction of the capital-form, is that the presentation remains at the level of the process of commodity exchange, in abstraction from the process of production. In the absence of any specification of production, it can only be assumed that the commodity owners who appear within the exchange process have themselves produced the commodities that they bring to the market (an assumption which will turn out to be false, in the case of the capitalist mode of production).

All the visible and general appearances of the exchange process are taken account of at this stage (at the introduction of the capital-form). Marx takes these appearances to be as follows. Firstly the price of any given commodity *displays* some average magnitude, an empirical average over time (the 'long run'), visible to the participants to exchange. These participants consider the long run average price the 'true' value magnitude of the commodity, as against the vagaries of day to day price fluctuations. A distinction between true value and day to day price is a corollary of the notion of value already uncovered in the preceding analysis. This is so because value can only gain form through the anarchic market process where there is no direct social control such that the day to day actual price magnitude is likely to deviate randomly from the true value magnitude. However, contrary to Marx's notion of long run average price magnitude, it seems unlikely that there is a stable and meaningful long run average magnitude within modern day capitalism, if the 'long run' is taken to be a period of years, because the true value magnitude will itself change over such a length of time. This has no effect on Marx's analysis because it is the basic distinction of true value magnitude versus price deviations around that true value that is important. Marx's notion of average price will be retained, therefore, in the exposition below. Accordingly the question of the relation between price magnitude and underlying labour time magnitude concerns the relation between what Marx terms the 'average price' magnitude and the magnitude of socially necessary labour time. Even if average price and labour time magnitude were proportional, an incongruity (non-equality) of the *actual* price magnitude and labour time magnitude is built into

Marx's presentation because the actual price is not, in general, equal to its long run average magnitude, rather it fluctuates around this magnitude.⁹

Also taken to be given empirically, at this stage, are the evident reasons for the fluctuations of actual price magnitude, e.g. short run variations in 'supply' and 'demand'. These are, in the long run, taken to 'have no effect', as captured in the notion of the long run average price magnitude around which the actual price magnitude fluctuates (explained above). It should be noted that these notions of supply and demand are not tied to the 'equilibrium' conceptions of supply and demand found in the mainstream economics of today. The notions simply recognise the appearance to individuals within the exchange process of fluctuations due to what *they* term 'supply' and 'demand'; the notions do not come with the baggage of abstract neo-classical economic theory.

In fact Marx is explicit that not even *long run average* prices and labour times will be in a proportional relationship, he writes, 'average prices do not directly coincide with the values of commodities, as Adam Smith, Ricardo, and others believe' (Marx, 1998a, p.240). Nevertheless Marx makes the entirely innocuous simplifying assumption of price / value¹⁰ proportionality, at this stage, in the absence of the more concrete categories required to determine their true systematic quantitative relationship, when this assumption can readily be relaxed. Unlike the innocuous assumption of proportionality, the view that there is *some* systematic relationship between labour time magnitude and price magnitude *is* crucial (see chapter 6 above). Thus Marx states that the average price magnitude is 'ultimately regulated' by the abstract labour time magnitude of a commodity, though the two magnitudes do not 'directly coincide' (ibid., p.240). However, Marx has yet to present the social process whereby labour time magnitude tethers price magnitude, i.e. he has yet to substantiate the labour theory of value. Therefore he does *not* simply take this quantitative aspect

⁹ Marx is simply following the classical political economists (and others) in invoking this 'average price' notion. According to Marx, 'price of production ... is really what Adam Smith calls *natural price*, Ricardo calls *price of production*, or *cost of production*, and the physiocrats call *prix nécessaire*, because in the long run it is a prerequisite of supply...' (Marx, 1998b, p.263).

¹⁰ In this context 'value' refers to the magnitude of socially necessary labour time, and 'price' to the long run average price, as discussed above.

of the labour theory of value as a given ‘assumption’ or ‘hypothesis’. In order to emphasise this point, and to present Marx’s *substantiation* of the labour theory of value, the discussion below will, where possible, refer to long run ‘average prices’ rather than values.¹¹ In this way it will be shown that Marx’s discussion of the contradictions of the capital-form and their resolution in the theory of surplus value does not rest on the *assumption* that labour times tether prices. Instead, the theory of surplus value is a key step in *substantiating* the latter proposition. Many critics have argued that Marx’s own presentation in Volume 3 (when corrected for mistakes) undermines the claim that labour times tether prices (this is the ‘transformation problem’). To the contrary it will be argued below that Marx’s transformation procedure is the second crucial step in substantiating this claim.

A further aspect of the abstract development up to the stage of the introduction of the capital-form is a conception that would today be termed ‘endogenous money’ (see Lapavistas and Saad-Filho, 2000). The basic notion is that the number of transactions that occur in the economy, divided by the average number of times a single unit of money is involved in a transaction, *causes*, for any given time period, the quantity of money that is in circulation. At this stage of the presentation there is a money commodity. The relevant causal mechanism underlying endogenous money is the ever present existence of money hoards (due, amongst other reasons, to what today would be called the non-substitutability of money), which adjust to ensure that the money supply maintains the appropriate quantity. Note that the value of money is assumed constant in the analysis such that (long run average) price changes are *relative* price changes, rather than being due to inflation or deflation.

¹¹ It is not always possible to follow this procedure below because the notion of ‘price’ necessarily implies the notion of ‘value’ and because ‘surplus value’ is defined in monetary terms (it is the increment denoted ‘dM’). Where the term ‘value’ is used within this section it is the monetary form of value that is referred to. There is no assumption of proportionality between the substance (labour) and form (money) of value, or even of any systematic relationship between the two. Instead, the social process will be *shown* to embody such a relationship.

Contradictions in the Capital-Form¹²

On the basis of the preceding clarifications it is possible to interpret Marx's discussion of the contradictions in the capital-form. His resolution of these contradictions, through the distinction of labour and labour-power, can then be presented along with the associated uncovering of capitalistic exploitation.

In the capital-form a commodity is purchased at a sum of money equal to 'M' for the purpose of a future sale, at a price of M', which is $M + dM$ (M and dM being positive in sign). Following the discussion above, the price of sale and of purchase would normally be taken to be the long run average price magnitudes which are proportional to socially necessary labour times given Marx's innocuous assumption of price / value proportionality. However, the surplus value inherent in the capital-form clearly appears to break the law of 'equivalent exchange'. Marx stresses the freedom of the parties to exchange in this context. This is a reference to the equal power and status of the exchanging parties inherent in the sphere of exchange. Private individuals, free to dispose of their respective commodities, enter the exchange process. They face the *given, objective* average prices of commodities. The average prices are given to all individuals hence determined by none of them – all participants to exchange are free and equal in this sense. Long run average price determination is the unintended consequence of their actions and occurs 'behind their backs' (Marx, 1998a, p.66). Marx calls this the 'normal' form of simple circulation, its form in abstraction from the consideration of outside factors. For example, any monopoly power to influence average price is to be considered an infraction of the normal laws of exchange and is abstracted from at this stage. In this context, surplus value appears to be inexplicable. There is one average price attached to every single commodity, known to commodity owners, prior to exchange. Rational commodity owners will not (in the long run) sell below the average price for then this would entail willingly and knowingly losing money in exchange. They cannot (in the long run) sell above average price (though they would if they could) because this would entail an irrational buyer. How, then, is surplus value possible?

¹² This section draws upon Marx (1998a, chapter 5).

One obvious possibility is to drop the assumption of the 'normal' laws of exchange. Through some external factor, say monopoly power or asymmetric information, an individual is enabled, for example, to push the average price of a commodity above the average price that would prevail under 'normal' conditions. Dropping the assumption does not, however, provide an explanation of surplus value. The ability to push up or down a long run average price and thus gain an advantage creates as many losers as it does winners. Thus, and as is well known, the increase that a monopolist achieves causes a redistribution of average prices in its favour but it does not increase the total revenue in the economy. Just as the monopolist, as seller, receives a higher price, so the consumer of the monopolist's product has to pay a higher price. The gain of the monopolist is thereby exactly matched by the loss of the consumer and the net gain within the economy as a whole remains zero. In terms of the characterisation of surplus value and the capital-form outlined above, the general experience and activity of losing money through exchange would be exactly as prevalent as the experience of gaining money through this process. This is not capitalism.

A second possibility is to consider explicitly the case of individual production of commodities. This is to consider a process that lies outside the sphere of circulation (exchange) and hence that has been abstracted from hitherto. The only way of conceiving of production, at this abstract level, is to assume individuals produce the products they take to the market. So cannot individuals create surplus value through such production? In fact, they cannot. The increment in money that that they create through their own labour is, by definition, not achieved *through the process of exchange*. In the case of individual production, then the individual, in their ongoing activity, does not experience money self-expanding. The individual knows that their own work to create a new or transformed commodity can indeed yield extra money (a commodity with a higher average price), but this increase occurs *through the labour of the individual*, and not *through the process of exchange*. This argument illustrates the importance of Marx's keen observation of just what surplus value is. It is not just an increment in money. Rather, it is an increment in money *that individuals, in their ongoing activity, experience as occurring through exchange*.

The mass of surplus value that accrues to the individual capitalist within the capital-form, $M-C-M'$, is dependent not directly on the amount of work that the individual does but on the magnitude of money that the individual is able to advance: the larger the magnitude of the capital that can be advanced, the more surplus value that it is possible to accrue. Marx must explain this day to day activity and experience, this empirically given appearance. This appearance would *not* be explained if the increment in money is due directly to the labour of the individual. The amount of labour time and effort contributed by the individual to production is not increased one iota by the quantity of money that the individual advances. This means that, if the increment in money is due to individual labour, then it *cannot* be attributed to the process of exchange. Instead of the appearance that money begets more money, there would simply be the appearance that individual labour, a process outside of exchange, begets money. Exchange itself would retain the appearance of simple circulation and there would be no capital-form. In order to illustrate further this point, and to pave the way for Marx's resolution of the problem of surplus value, it is useful to examine the case of (what is now termed) machinery. This is done below.

Why, it could be asked, cannot an individual producer purchase a machine in order to increase the quantity produced, hence the amount of money made on sale? Why can't the extra money be used to purchase more machines so further increasing output and so on? Would not this be surplus value? Would not the problem of surplus value be solved on consideration of machinery? It should first be responded that machinery, as it now appears to individuals of the present day world, is the result rather than the cause of the capitalistic mode of production. Nevertheless consideration of the question of machinery is revealing at this stage, as will be explained below.

The purchase of a machine by an individual is the purchase of a thing with a specific and pre-specified use; this makes it a use value. Unlike consumption goods, this use consists in the ability to make some specific contribution to the production of new use values, rather than in the ability to satisfy directly human needs and wants. The machine exists as a potential use value on sale and is realised as a use value on being employed on production. In other words the useful quality of the machine, the ability to make a specific contribution to production, exists only as a potential on sale,

becoming a reality after sale, in the production process. This potential / actual distinction is common to all commodities. For example on purchase of a Mars bar, I purchase the potential 'eating of a Mars bar' and I realise this potential only in consuming the bar after purchase. Or, on purchase of a pen, I buy a potential 'thing I am using to write with' and I realise this potential after purchase, when actually writing.

A corollary of the above is that the contribution of the machine to production is fully paid for prior to production, in the sale of the machine, just as the consumption of a Mars bar or the use of a pen is fully paid for prior to realisation, in sale. Although this point is simply a clarification of what 'buying a machine' actually means, something that is taken for granted in everyday life, it is very important. It is, moreover, applicable to the purchase of any non-labour input, not just machines but land, raw materials and tools. The contribution of land, raw materials and tools is fully paid for prior to production just as the consumption of a Mars bar or the use of a pen is fully paid for prior to realisation, in sale.

If the same reasoning were applicable to labour input as to non-labour input (machines, tools, raw materials and land) then it would follow that all input contributions to a production process are paid for, on purchase of all the relevant inputs on the market. Clearly the result, the objective realisation, of all the input contributions taken together is the *output* that they produce. Hence, if all of the input contributions are fully paid for, on purchase of the inputs on the market, then by way of tautology the specific *output* that they produce has been fully paid for, on purchase of all these inputs. To buy the inputs would, in short, be equivalent to buying the specific output that they produce (and *vice versa*). In terms of the magnitude of price, it would follow that the respective magnitudes should, likewise, be equal. If labour input is akin to non-labour input in the manner described above, then the cost of production of the output, the sum of the prices of the individual inputs, should be equal to the price of the output.¹³ The only additional assumption to that made

¹³ Thus, in Volume 3, Marx refers to the illusory appearance that 'cost price' is the true price, or value, of the commodity and that profit is an (apparently inexplicable) surplus over and above this cost price. The key to the illusion is the appearance that all input contributions, including that of

regarding labour input, is the assumption, in accordance with the presentation above, that each commodity is allotted some (average) price magnitude that is given to the individual participants to exchange, rather than being determined by them. The sum of the input contributions, on the one hand, and the output, on the other hand, are simply different forms of one and the same use value, once in 'fluid' form (the production process), once in objective form (the product). Hence they should have the same price, according to the minimal assumption that each commodity (each type of use value) has a given price.

In sum, it would seem that neither the purchase of the machine, nor the purchase of any other input, can explain surplus value. Whatever is purchased, it seems, yields the same monetary value, if used as a contribution to output, as it cost to purchase. Far from being a source of increasing value, the exchange process, and hence money, would appear to be barrier to it – only ever yielding in value what it has previously taken away. But if an item has not been purchased on the market then it cannot yield surplus value either, because surplus value is not just an increment in value, it is an increment that has occurred, or appeared to occur, *through exchange*.

To repeat: the above argument holds *regardless* of the pricing mechanism (which has yet to be grasped). The only fact about the mechanism determining (long run average) price magnitude that has been established is that each type of commodity is allotted some average price magnitude and that this occurs 'behind the backs' of individuals. This average price must be 'ultimately regulated' by (systematically related to) labour time magnitude but the social mechanism that enforces this ultimate regulation has yet to be developed. For this reason the presentation has not assumed a systematic relationship between price and value. The presentation of capitalistic exploitation below is a key step in showing that such a relationship is entailed within the capitalist system, i.e. in substantiating the labour theory of value.

labour, have a price, and that this price is paid by the capitalist, on purchase of the inputs. Marx refers back to the analysis of surplus value and exploitation in Volume 1 as the uncovering of the true value relations beneath this illusory appearance. Thus far in the presentation of the problem of surplus value, above, the 'illusory appearances' have been articulated. The true nature of surplus value will be presented below.

Resolution of the Contradictions: Labour-Power and Capitalistic Exploitation¹⁴

Marx goes on to argue that the special commodity, 'labour-power', is the source of surplus value. He argues that, by purchasing labour-power, the capitalist is enabled to acquire surplus value. Above, in interpreting Marx's prior argument on the contradictions in the capital-form, it was stressed that Marx's argument does not rest on any explicit pricing mechanism. Thus it does not rest on the assumption that the immanent measure of value (socially necessary labour time) is proportional to the external measure of value (average price magnitude), nor even on the assumption of a systematic relationship between the two. Marx's argument regarding labour-power can, at first sight, appear firmly based upon such an axiom, however. Therefore an interpretation of the argument will be provided below whereby *no such axiom is invoked*. Marx's argument is a further *development* and *substantiation* of the labour theory of value (the law of value), not a deduction resting upon it.

Throughout *Capital* Marx continually and clearly stresses that the labour that the capitalist receives upon consumption of labour-power differs from all other inputs because, unlike these inputs, labour is 'value creating', it is 'fresh', 'new' labour, that creates correspondingly 'fresh' and 'new' value.¹⁵ Many interpretations of Marx concentrate upon the fact that labour-power and labour involve, thereby, two different quantities of labour time. The labour-power has a value that is the socially necessary labour time for its reproduction. On the other hand, the labour performed upon realisation of the labour-power, in the production process, has a variable duration, in no way related to the value of labour-power. Hence the labour time received is not the same as the labour time paid for and surplus value is possible. However, this divergence of quantity is not the only important point that Marx is making. For, Marx also expresses, with the very same words, that labour is *creative* of value, that it is *fresh* and *new*. The reference to freshness and creativity is important because it is a reference to the crucial and definitive transhistorical aspects of humanity. Moreover the reference to creativity of *value* is also of enhanced

¹⁴ This section draws upon Marx (1998a, chapters 6–7).

¹⁵ See, for example, Marx (1998a, ch. 8).

significance once it is recognised that value, as a definite form of labour, has a transhistorical aspect, even though value is an historical, rather than transhistorical notion. That is to say one cannot grasp value (congealed abstract labour) without having first grasped the transhistorical features of labour. As a specific form of these general aspects value incorporates these aspects, as well as providing the new dimension of form to them.

To fail to articulate the transhistorical with the historical aspects of value is to miss the key causal factor that Marx's entire presentation rests upon. For, though the point most interpretations do pick up upon (the two different magnitudes of labour time associated with labour-power and its realisation) explains surplus value, it does so only given the prior premise that the labour theory of value is true. But this 'premise' has yet to be substantiated: prior to Marx's uncovering of the source of surplus value, Marx's presentation does not provide any elucidation of the causal mechanism (social process) whereby the magnitude of value 'ultimately regulates' the magnitude of average price. It will be argued below that the articulation of the key transhistorical features of labour with the key specific features of value is crucial to Marx's elucidation of this mechanism, an elucidation which begins with his theory of exploitation and is further developed in Volume 3.

The argument below by no means consists in the mere claim that the ontologically distinct nature of labour, or of social production, justifies the labour theory of value and surplus value. Such a claim is commonplace (e.g. Elson, 1979; Mohun, 1994; Smith, 1990, pp.121–2). Rather, it is the *articulation* of the key transhistorical features of labour (features that are the culmination of Ilyenkov's philosophy, as detailed in previous chapters above) with the specific social form of labour that is crucial. For this reason it may be helpful to clarify how the argument within this chapter differs essentially from (or essentially develops) such commonplace claims. Mohun (1994, pp.215–6) argues that '[v]alue is labour-time because of an essentialist ontology that what defines human existence as specifically human is purposive productive activity'. The 'new interpretation' that he advocates develops a robust accounting procedure whereby National Accounts statistics are transformed into Marxian categories based upon the labour theory of value (Mohun, 2002;

forthcoming).¹⁶ From the perspective of this chapter, the key problem with the new interpretation is that the labour theory of value remains at the level of a mere 'premise', 'assumption' or 'hypothesis', albeit one drawn from a transhistorical principle. At no point is the premise substantiated: Mohun (and the new interpretation more generally) does not grasp the social process whereby labour and surplus labour cause price and profit, and through which the magnitudes of the former tether the magnitudes of the latter. Similar remarks apply to other such claims within the literature. Without substantiation, then at the very best the labour theory of value appears as an interesting 'accounting procedure' with no apparent causal import (though, perhaps a moral one).¹⁷ Hence the labour theory of value would be scientifically redundant, just as Steedman (1977), and so many others, have claimed.

Firstly the relevant transhistorical features of labour will be made explicit. Secondly their articulation within the capital-form will be shown to substantiate Marx's theory of surplus value. The presentation of the key transhistorical aspects draws upon Ilyenkov (1977) in addition to Marx's lucid account in chapter 7 of *Capital*, Volume 1. Chapter 4 above articulates these transhistorical aspects in much greater detail as the key to Ilyenkov's materialist dialectics; chapter 6, above, contains a brief summary of materialist dialectics.

The key aspect of labour as a transhistorical notion is as follows. Social individuals creatively and purposively transform themselves and the object through their labour. Through labour, the social individual thus creates new objects and newly acquired abilities. The labour that the social individual does is not structurally inscribed, not pre-programmed within that individual, within their inner chemical, biological or neurophysiological structures. Rather, the key relevant inner structures must be susceptible of transformation. Social individuals must have the ability to transform their inner structural constitution in such a way as to enable the creative self-transformation of outward bodily activity and simultaneous creative transformation of

¹⁶ Other advocates of the new interpretation include Dumenil (e.g. 1980), Foley (e.g. 1982), Glick and Ehrbar (1987), and Lipietz (e.g. 1982).

¹⁷ Thus Fine et. al (2000) argue that the new interpretation reduces to a sociological theory with no bearing on economic theory (i.e. the theory of prices, wages, profit, interest, etc.)

the object; so as, in other words, to enable labour to be performed. In contrast to humanity (or any like creature within the universe), the most sophisticated of machines does not produce anything that is new. To the extent that it transforms itself, or other objects, at all, a machine does not do so creatively. It produces nothing that was not already pre-programmed within its inner structural constitution.

Thus machines, unlike humans, are: (1) Specialised. Indeed the more sophisticated a machine is, the more specialised it tends to be. Thus the computer that 'beat' Gary Kasparov at chess, was incapable of walking on and off the stage, or making a cup of tea, or doing anything other than suggest chess moves; (2) *Pre-specified*. Machines have an essentially fixed inner structure, hence a fixed range of outward activities. The most 'intelligent' of machines is not yet able to self-transform itself, let alone an object in anything but a fundamentally limited way. If, one day, the 'robot' of science fiction were to come to be real, if a 'robot' could creatively transform to the same extent as humanity, then it would be a conscious being, a social individual, equal in status to humanity and not a 'robot' at all. It would, in other words, be a labourer.¹⁸

What then is the significance of these transhistorical aspects of labour for the specific historical form denoted surplus value? On the purchase of labour-power, the capitalist is buying a commodity with no fixed inner structure, hence no fixed and pre-specified ability to contribute to production. So to buy labour-power is not to commit to any specific quality and quantity of labour (no matter what the labour contract formally specifies). The capitalist pays precisely for the sole right to determine this quality and quantity in consumption of labour-power; the capitalist does not pay for the labour but for the right to determine this labour. Indeed the actual quality and quantity of labour performed is not an aspect of labour-power; it is literally immaterial to the nature of this labour-power what quality and quantity of labour is performed upon the capitalist's consumption of labour-power. By contrast, on purchase of a machine, the capitalist acquires something with a fixed inner

¹⁸ Smith (1990, p.70) and Carchedi (1993, p.216) try to defend the labour theory of value against the criticism which imagines that *all* production could one day be 'robotised' (e.g. Hodgson, 1982). However, Smith and Carchedi do not recognise the straightforward rebuttal of such criticism articulated above.

structure and so a materially fixed and pre-specified contribution to production. In terms of the potential / actual distinction common to all commodities, the transformation from potential labour, i.e. labour-power, to actual labour involves new, fresh labour and hence the creation of something new. In the case of the transformation from the specific potential contribution of a specific machine to its actualisation, in production, nothing new is created. There is a transformation from potential to actual but this is not a creative transformation.

Thus, only in the case of labour-power is the separation between purchase of potential input contribution and the actual determination of the quality and quantity of this contribution possible. It follows that, though the product is the collective realisation of the inputs, one of the input contributions, viz. labour, has not been paid for by the capitalist producer. Hence the sum of the prices of labour-power and means of production paid by the capitalist producer does not equal the price of the output. The difference represents the difference between the labour-power that is paid for and the actual labour performed (which is not, and cannot possibly, be paid for prior to its performance). Of course, for individuals to actually offer this commodity (labour-power) for sale requires that 1) They 'own' it – they consider it to be a possession of theirs (hence slave labour does not define the capitalist mode of production) and 2) They do not own anything else in quantity sufficient to provide for their needs and wants. For, the sale of one's very ability to labour, regardless of the specificity of the labour, is neither natural (it is not characteristic of all societies) nor desirable (it constitutes the sale of the very essence of oneself to another person).

Surplus value *is*, then, congealed unpaid ('surplus') labour, as represented in the increment of money at the end of the capital-form (dM). This argument holds regardless of the mechanism that determines (long run average) prices (save the fact that each type of commodity has a given average price). Indeed it is a tautology but one with great causal import. For, without labour-power, hence the possibility of unpaid labour, there is no surplus value, hence no capital-form (nor further developments such as profit, interest and rent). Unpaid labour is the *cause* and *substance* of surplus value, and *therefore* it is the necessary and sufficient condition for surplus value and, abstracting from realisation problems, for its monetary forms,

profit, interest and rent. Just as value, as represented by price, is the objective form of social labour under capitalism, surplus value, as represented by dM , is the objective form of surplus labour under capitalism. For, *any* class society must generate a surplus product which is appropriated by the non-producers such that the producers are exploited (this is a transhistorical claim that has not been developed above). It has now been established that the specific form taken by exploitation is that of the sale of labour-power to the capitalist, and the appearance form of surplus labour is the increment denoted dM appropriated by the latter. Yet all of this is mystified within capitalism because the forms of appearance are not immediately recognised as such (as objective representations of social labour) by individuals. Indeed, exchange itself is a bastion of freedom and equality. Later, in Volume 1, the form of wages is shown to further obscure the real relations behind it.

From Exploitation to the Transformation 'Problem'

Having, in *Capital*, Volume 1, chapters 1 to 6, established what value, capital and surplus value are, the next logical step is to develop explicitly the nature of the production process implied in the notion of surplus value and the form of capital, but not yet grasped. The immediate task is to grasp the production process as a process of surplus value creation. This is because surplus value has been uncovered as the distinguishing feature of the capital-form, a form that is itself the distinguishing feature of capitalist, as opposed to pre-capitalist, exchange. Once this task is accomplished then the transformation of surplus value into capital, i.e. the ongoing process or circuit whereby surplus value is re-advanced as fresh capital, which in turn creates further surplus value, can be grasped (this is the process of accumulation of capital). Accordingly Marx follows this logical procedure which fills the rest of Volume 1.

It must be stressed that Marx is doing no more than drawing out the implications, both logical and historical, of the generalised capital-form ($M-C-M'$), that appears before the eyes of all individuals within capitalism and is the ongoing daily experience of the capitalist. The development, in this order, is the *only* logical and rational way to proceed. If surplus value is congealed surplus labour then it must be made explicit

what this implies for the production process. The production process must be grasped as it *is* and *must be* given the initially won grasp of the nature of the capital-form (M-C-M'). There is simply no theoretical point, nor logical possibility, of trying to grasp fully further aspects characteristic of capitalistic society until the implications of what has already been grasped about it have been drawn out. Furthermore in following this logical ordering a more developed explanation of the prevalence of the commodity within capitalist society will be gained. To anticipate, the capital-form, M-C-M', is a continually expanding process of production sweeping away other forms of production where the commodity does not predominate. Thus the starting point, the most general appearance of the product within capitalism i.e. the commodity, will be grasped yet more fully on the development of the capitalistic production process.

In presenting these further developments, the capital-form, M-C-M', must be 'taken at its word'. This idea can be explained as follows. The preceding analysis has grasped M-C-M' as the objective social representation of the process of surplus value production and of accumulation. However, it still remains to be grasped fully how the social process achieves this representation, how it enforces the quantitative link between cause, labour time and surplus labour time, and effect, the appearance forms of value and surplus value (where cause and effect have already been established as such in the previous analysis). The quantitative tethering of price by labour time and of dM (the appearance form of surplus value) by surplus labour time remains to be explained fully. Specifically, the theory of exploitation has established that surplus value must be due to surplus labour, given only the evident fact that each commodity receives a given (average) price, but the process whereby such average prices are 'allotted' has yet to be grasped. This process of pricing cannot be grasped until the nature of the capitalist production (hence labour) process, necessarily implied in the development thus far, but not yet made explicit, is itself made explicit. In other words it cannot be grasped until the process of surplus value production and accumulation that has been uncovered as the essence of the capital-form is grasped fully in abstraction from (and preparation for) further developments.

Throughout the entire level of Volume 1, therefore, a very high level of abstraction is maintained. Long run average prices are considered proportional to values in lieu of the development of the processes that enforce the quantitative link between price and value (the 'ultimate regulation' of prices by values). An acute awareness that the production of surplus value requires some definite social process linking it quantitatively to its own objective form of appearance in circulation must be maintained therefore. Moreover it must be recognised that this social process of quantitative representation must occur haphazardly, unconsciously, 'behind the backs' of individuals, given that no individuals have control over price determination nor have direct consciousness of the true nature of value and capital. Hence the process of quantitative representation is likely to be highly imperfect and contradictory (e.g. non-products may be given a price). It will certainly be illusory because, even at this stage of the presentation, it is clear that individuals will not recognise immediately the cause of, and essence represented in, the economic forms they are in day to day contact with.

Nevertheless the fact is that capitalism is an ongoing social form. Despite, or through, its contradictions capitalism has become predominant (as reflected in the generality of the commodity, with which the presentation began, and of the capital-form, introduced later in the presentation). This entails that there must be some tendency in place to enforce the tethering of the respective monetary measures of value and surplus value by their respective immanent measures of labour time and surplus labour time.¹⁹ If prices do not quantitatively reflect labour times to some extent then society will collapse. Likewise, if the money form of surplus value does not quantitatively reflect unpaid labour time, then this risks production moving away from the source of surplus value (from industrial production). The theory of exploitation has established – given only the evident fact that each different commodity is allotted an average price – that without unpaid labour there will be no surplus value at all and capitalistic production (production for surplus value), hence capitalistic society, will collapse. Without surplus labour, through the purchase of

¹⁹ The tethering of price magnitude and of the money magnitude of surplus value are not, of course, independent processes.

labour-power, there will be no surplus value, no profit, no interest, no rent. Unpaid labour is the *substance* of surplus value. Surplus value *exists*; it is congealed surplus labour. Quantitative infractions of proportionality between surplus labour time and the magnitude of the monetary form of surplus value are, therefore, to be considered quantitative *modifications* of a single substance as it gains an appearance form as money, rather than factors independent of labour time. By assuming price / value proportionality capitalism is thus developed in its essence, in its purity, prior to the immanent and necessary modifications of this essence. It can be noted that the very fact that there is an immediate non-identity between value substance (labour) and value-form (money) is the most abstract reason why crises are possible, an immanent possibility developed in Volume 3.

Marx's development of surplus value production and accumulation will not be presented here. Nor will the development of the circulation process, in the light of the newly grasped production process, undertaken in Volume 2, be presented. Instead, the pricing mechanism referred to above and developed in Volume 3 will be presented briefly. The aim of the presentation is to vindicate Marx's theory and to sketch the reason why there is no major transformation 'problem' in Marx's presentation, contrary to many interpretations as recounted above. This sketch aims to deepen, i.e. develop the abstract basis of, the interpretation of the transformation put forward by Fine (1983) and Saad-Filho (1997b; 2002, ch. 7). The reader is referred to their work for a full presentation at a more concrete level.

*The Transformation 'Problem'*²⁰

The transformation problem has long been considered the Achilles' heel of the labour theory of value. Accordingly the literature on the problem is vast.²¹ However, the presentation below does not need to delve into this vast literature and will be relatively brief. This is because the presentation draws upon a line of interpretation pioneered by Fine (1983) and developed by Saad-Filho (1997b; 2002, ch. 7) that has

²⁰ This sub-section interprets Marx (1998b, chapter 9).

²¹ See Saad-Filho (2002, ch. 7) and references therein.

comprehensively 'solved' the transformation 'problem' by showing that Marx's actual problem and its solution has entirely escaped the vast literature. That the literature should be so overwhelmingly mistaken is as Fine (1983, p.520) writes, 'astonishing'. Below it will be shown how Marx's transformation is a further development and substantiation of the theory of value and surplus value presented above. In this way one possible contributory factor towards the 'astonishing' number of mistaken interpretations will suggest itself. The interpretation of the theory of surplus value developed above was also claimed to be little known. This interpretation of the theory drew, in turn, from Ilyenkov's materialist dialectics which itself is relatively unknown within the literature. Yet this theory provides, according to the argument below, a necessary 'deepening' of the interpretation offered by Fine and Saad-Filho. The relative neglect of Ilyenkov's materialist dialectics may, therefore, be one contributory factor towards the relative neglect of Marx's own approach to the transformation procedure. It will be suggested by way of conclusion below that the significance of this argument is far wider than may at first be apparent.

In line with the interpretation of Volume 1 presented above, the transformation in Volume 3 shows, finally, *how* congealed abstract socially necessary labour time, both value and surplus value, quantitatively tethers its own appearance forms, prices and profit (the cases of interest and rent are abstracted from at this stage). It shows what the social mechanism is that determines average prices and so brings about this tethering. The transformation shows how *systematic* deviations from proportionality between labour times and prices occur; hence it shows how a systematic, but not proportional, relationship between prices and labour times is enforced. The key mechanism is *competition* between capitals. Note that competition is a phenomenon recognised by all individuals within capitalism. It is a 'surface' phenomenon, entering into the consciousness of individuals directly but not, it is now apparent, transparently rendering its own essence. For, competition obscures the substance of surplus value, viz. surplus labour. Competition appears as the quest for profit on the entire capital that has been advanced by the capitalist. Thus both the means of production and the labour-power appear on equal footing. It appears that this entire capital is the source of profit, whereas in fact only labour-power generates the surplus value underlying profit. Moreover, it appears that both labour and the means

of production are paid in full. Thus, as elaborated in Volume 1, the form of wages masks the fact that labour is not paid for and that only labour-power is.

Competition occurs between industrial capitals, both within and between industries. Capital migration causes a tendency for the equalisation of the rate of profit on capital advanced across the average capital of each industry. Profit rate equalisation is incompatible with price / value proportionality because profit is calculated on total capital advanced. A capital with a relatively high proportion of means of production used up (constant capital) to labour expended will be priced the same as a capital of same size but with a lower proportion, despite the former capital having a lower labour content than the latter. In the presentation a constant ratio of labour-power to labour expended, i.e. a constant 'rate of exploitation', is assumed. Given this assumption the ratio between constant capital and variable capital is denoted the 'composition of capital'. Marx's 'problem' is then to show how the cause, labour-time, tethers the effect, price magnitude, in the face of this pricing mechanism, which, on the surface, appears to contradict the labour theory of value. Marx achieves this by his recognition that what has occurred is a *redistribution* of surplus value between capitals such that the profit rate is equalised. Conceptually this is clear. Mathematically Marx's demonstration requires a two-step procedure that is equally clear despite so many misinterpretations and is explained below.

The first step is to abstract from the change in value of the inputs as the profit rate is equalised across industries. This procedure is demonstrated in Volume 3, chapter 9. The abstraction from input price variation entails that what is called the 'organic' composition of capital is being studied. As is well known two aggregate equalities hold in this case. Total prices equal total values; total profit equals total surplus value. Thus Marx shows clearly how the transformation is indeed a redistribution of surplus value. The aggregate equalities remain intact as long as the effect of the changes in the circulation (exchange) process on the prices within the production process is abstracted from. Note the absurdity of the interpretation of Marx's procedure that insists he has made a mistake by not transforming the inputs when this is the whole point of this first step!

The second step is to allow the input prices to change (this entails that the 'value' rather than the 'organic' composition of capital is being studied). In this case, as is well known there will not be an aggregate equality of profit and surplus value. Marx never presents an actual example of this but the relevant calculations have been performed many times since (the method of calculation being similar to that of the Sraffian analysis). Thus Marx has shown theoretically (without presenting an example, on this occasion) that changes in the circulation process lead to modification of input prices so that even in aggregate surplus value does not equal aggregate profit.

Thus Marx's entire analysis is vindicated and developed further. Through the process of competition labour times do indeed tether money forms, as expected, but a process of redistribution of surplus value occurs, further distorted by the impact of price changes on the price of inputs. Such distortions were also expected. Individuals face given and fixed prices (the change in price that occurs in the procedure is a logical, not actual one) just as they did in Volume 1, chapters 3 to 6, but now it has been *shown how* these prices are 'allotted' by a social process going on 'behind the backs' of individuals. The outward appearance of this process is that of the competition between capitals. Furthermore it has been *shown how* this process engenders a systematic relationship between prices and labour times: *systematic* deviations from proportionality have been shown to occur. Because the conditions required within Volume 1, chapters 3 to 6, hold (and indeed have been *shown* to hold) then the entire abstract analysis of surplus value and exploitation made in Volume 1 holds also at this much more concrete level. It remains the case that the only contribution to production that the capitalists do not pay for is unpaid labour. Without this there would be no surplus value to distribute. It is the *cause* and *substance* of profit for reasons that hold just as much in the current analysis as they do in Volume 1. And value is inherently abstract, it must gain form through money. Now the quantitative tethering of money form by underlying essence (labour time) has been presented (at the most abstract and simple level possible). The qualitative mediation of value as price has been shown to entail a quantitative mediation of the immanent labour time magnitude. Neither price / value proportionality, nor even aggregate surplus value / profit equality, hold due to this necessary process of value representation. This being

primarily due to the redistribution of surplus value in profit, coupled with the further distortions as changes in circulation reflect back upon input prices.

Thus there is a quantitative modification of the essence that has already been shown to exist. A number of factors contribute to the observed price magnitudes therefore. But these are to be conceived as modifications of the causal substance and essence of labour time rather than *separate* factors. They are the immanent result of the fact that value is inherently non-sensuous so must gain appearance form; must appear as something sensuous, so opposite to the inherently non-sensuous value. To repeat: there is a quantitative mediation, hence deviation of price from value, *as expected*. There is nevertheless quantitative tethering of price by value *as expected*. At the same time it is now clear how the pressure of competition is the outward drive of the processes analysed in Volume 1, viz. the various systematic and historical processes of surplus value production and accumulation, the very laws of motion of capitalism. The 'inner essence' does indeed determine the outer form of appearance, even as it is distorted by it. These processes can be further developed given this newly developed grasp of competition.

Conclusion

The presentation above has attempted to argue that the labour theory of value tautologically follows from the prevalence of the commodity and of the form of capital (M-C-M') that is empirically evident. A failure to recognise this tautology must, therefore, entail a failure to grasp fully the *differentia specifica* of capitalism. The key original contribution has been to demonstrate this tautology for the case of surplus value and exploitation, drawing upon Ilyenkov's materialist dialectics. The tautology is not something defined by any individual. Rather, the tautology flows from the empirically observed characteristic forms of capitalism. Value, grasped as congealed labour time, and surplus value, grasped as unpaid labour time, therefore have fundamental causal impact in contemporary society, an impact that is *not* grasped by prevalent interpretations of Marx, nor by other social theorists.

Thus the interpretation of Marx's theory of value has been argued to deepen the theoretical foundations of the interpretation of the transformation 'problem' pioneered by Fine (1983) and developed by Saad-Filho (1997b; 2002, ch. 7). Yet this latter interpretation is not widely accepted (rather the 'traditional' and 'value form' interpretations are more prevalent within the sympathetic literature – see Saad-Filho, 2002, ch. 2 and ch. 7). In order to appreciate the wider significance of this chapter, it is vital to note that the approach to the transformation problem that has been advocated is an integral part of a broad conception of the architectonic of *Capital* and of capitalism, pioneered by Fine (e.g. 1989) and Weeks (e.g. 1981). The distinction between the 'value' and 'organic' compositions of capital recounted above is crucial for the further developments of Marx's theory. For example, the very next such development is Marx's theory of crisis as encapsulated in his conception of the tendency of the rate of profit to fall. This theory is shown by Fine (1992) and Weeks (1981, ch. 8) to be a logical development of Marx's transformation procedure, allowing theoretical explanation of that great symptom of capitalism and of capitalist crises, viz. rapid technical change. A clear indication of the need for wider dissemination of this theory is that *none* of the contributions to the recent debate regarding Brenner and global economic crisis referred to this crucial feature of Marx's theory, except the contributions of Weeks and Fine (and associates) themselves!²²

In sum, there *already exists* within the literature a clear comprehension of the fundamental laws of motion of capitalism, laws that explain the complex and crisis-ridden processes of capitalistic growth and destruction. Equally they are laws which facilitate and demand detailed concrete research and political action. But this comprehension, based upon a sound interpretation of Marx, developing the approach pioneered by Fine (op. cit.) and Weeks (op. cit.), is not widespread even amongst Marxist economists. Undoubtedly these circumstances are, as Pilling once put it, 'a reflection of political and ideological differences which can only be resolved in practice' but as Pilling goes on to write, 'another important aspect of many of these

²² See Weeks (2000), Fine et. al. (1999) and, for example, the symposium in *Historical Materialism*, Issues 4–5.

disputes has been the relative neglect of the fundamental questions of Marxist method' (Pilling, 1980, p.2). Through an interpretation of the theory of value and surplus value which is firmly rooted in the philosophy and method of Ilyenkov, viz. materialist dialectics, it is hoped that some obstacles towards the further dissemination and collective development of the theory have been removed by this chapter. If the reader is moved to consult the above references on Marx's theory and is helped to grasp and develop these on the basis of the philosophical, methodological and theoretical development (deepening) presented within this chapter (and thesis overall) then the chapter (and thesis overall) will have served its purpose.

Chapter 8. Conclusion

Introduction

In view of the endemic flaws of mainstream economics and the social sciences, and in face of the tyranny of global capital, this thesis has argued for a return to the writings of Marx, as illuminated by Ilyenkov's materialist dialectics. The thesis offers a set of starting points, at a range of different levels, for the development of Marxist thought. Each respective chapter has contributed to understanding at a specific level of analysis. Taken as a whole, the main chapters have helped to illuminate the thread that ties the various levels together, viz. that of materialist dialectics. The basis of materialist dialectics is the argument that ideas arise only through labour. On this view, the labourer *self-transforms* and, simultaneously, transforms *the object* through their labour. For this reason, the 'mode of production' is fundamental to Marxism. The recasting of Hegelian systematic dialectics on this materialist basis provides a method adequate to inform the theorisation of the contemporary mode of production, viz. capitalism. Chapters 2 to 5 of the thesis both critique 'critical realism' and serve to elaborate the abstract basis of materialist dialectics. Chapters 6 and 7 draw upon materialist dialectics in order to present the abstract basis of Marx's theory of capitalism, viz. Marx's labour theory of value and surplus value.

Marx's Philosophy and Method

The most abstract and simple aspect of philosophy is the relationship between thought and being. In order to uphold the possibility of rational thought, it is necessary to articulate an identity-in-opposition between thought and being, as argued by Ilyenkov, in his interpretation of Spinoza. Yet the notion of such an identity-in-opposition is unpalatable to most Marxists, let alone to mainstream philosophers or social scientists. For this reason, Ilyenkov's ideas are best presented via detailed consideration of relevant aspects of contemporary Marxist thought. Accordingly, chapters 2 to 5 detail a critique of critical realism, and contrast critical realism to materialist dialectics and systematic dialectics.

Since its original systematisation by Roy Bhaskar, the key aspects of the critical realist ontology and method have found a broad appeal and a distinctive articulation across the social sciences and Marxism. As discussed in chapter 2, social scientists and Marxists (the chapter focuses in particular on the work of Bob Jessop) have adapted and developed critical realist themes, such as abstraction, retrodution, the transformational model of social activity and stratification, in the attempt to explain the global economy. Jessop and other social scientists note the outward congruence between the language of critical realism and Marx's statements regarding method (however, later chapters of this thesis argue that this outward congruence is illusory). Though the key features of critical realism are easy to discern, it is more difficult to expose the philosophical principle, or 'conceptual essence', from which these features derive, and to evaluate critical realism (and dialectical critical realism) on that basis. Subsequent chapters attempt just such an exposition and evaluation.

The critical realist 'emergence' theory of mind leads critical realism to stress the difference between an idea and its object, the 'non-isomorphism' or 'non-identity' of these two, causally related things. On close examination, the whole edifice of critical realism, and indeed Bhaskar's 'dialectical critical realism', is built upon the foundation of this fundamental difference between an idea and its object. Yet, as Hume argued, causal 'real essences' independent of, and not directly accessible to, the mind must be unbounded by the needs of human knowledge. In particular, they could cause the 'known laws of nature' to cease to exist at any moment. Far from being a 'philosophy for science', critical realism thereby turns out to lead directly to Humean scepticism, an argument developed in chapter 3. Chapter 4 develops an alternative philosophy to critical realism, viz. Ilyenkov's 'materialist dialectics'. According to Ilyenkov, the abstract basis of materialist dialectics is Spinoza's argument that, through ongoing spatial activity, the thinking body achieves accordance with, or an isomorphism between, its own general mode of activity and the specific shape or trajectory of the object. Adequate ideas consist in self-awareness of this isomorphism; they are not separate from and causal upon the outward spatial activity of the body, as critical realism would have it. The ground for Humean scepticism is thereby removed. Marx transcends Spinoza fundamentally through the recognition that humans transform not only themselves but also *the object* through their labour. On this foundation, Ilyenkov develops in great detail

materialist dialectics at the level of philosophy. Ilyenkov argues that Hegel's philosophy is ultimately idealist because Hegel fails to address the mind-body relation successfully, in the manner of Spinoza. As chapter 4 notes, Ilyenkov's critique of Hegel is applicable to contemporary (Hegel-inspired) 'new dialectics' because new dialectics does not even recognise the significance of the mind-body relationship. It is hoped that the reader will be persuaded to consult Ilyenkov's many writings on Marxist philosophy. Given the aim to pursue the unifying thread of materialist dialectics across philosophy, method and theory, it is the issue of method that is taken up next.

Critical realism, as argued in chapter 5, ultimately flatters to deceive in its promise to deliver a method adequate to the social totality. The method is based upon the non-isomorphic and causal relation between idea and object. All that can be attempted, given this premise, is the hypothesis of *static* underlying essences that produce *given* forms. This is because the forms are non-isomorphic to their structural cause thus cannot contain information regarding the development of new forms through structural (essential) transformation. Dialectics is uniquely suited to the task of theorising transformation. Yet dialectical critical realism, despite its apparent promise to overcome deficiencies of critical realism regarding the theorisation of transformation, is based upon the conceptual essence of critical realism and so fares no better at theorising structural transformation. The branch of new dialectics termed 'systematic dialectics' offers a superior interpretation of Marx's method. Marx's starting point is the whole object realm, not a single 'appearance form' as in critical realism. His method of enquiry involves a systematic advance towards the 'cell-form' and thus is alien to the critical realist approach based on 'hypothesis and test'. Marx's method of presentation involves a dialectological development from the abstract and simple 'cell-form' to ever more concrete and complex categories; in contrast to critical realism this does not entail a juxtaposition of individual 'essences'. Notwithstanding this advance over critical realism, systematic dialectics fails to address the crucial issues regarding mind and object addressed in chapter 4. For this reason, systematic dialectics is ultimately idealist, in the sense that Ilyenkov argues that Hegel is idealist, as noted in chapter 4. The idealist defects of contemporary and Hegel-inspired systematic dialectics, and

the superiority of materialist dialectics, are brought into sharp relief on closer examination of Marx's theory of capitalism, undertaken in chapters 6 and 7.

Marx's Theory of Value and Surplus Value

The most striking characteristic of contemporary Marxist thought is the neglect or miscomprehension of Marx's own theory of capitalism. Whereas, for Marx, the determination of value by labour time is the key to the comprehension of capitalism, for most social theorists, and for many Marxists, the labour theory of value is an anachronism, of no contemporary scientific worth. Even amongst those Marxists who attempt to affirm Marx's labour theory of value, the interpretations of that theory are many, varied and, for the most part, mutually incompatible. For example the recent Marxist debate regarding post-war development, sparked by the Asian crisis of 1997–98 and fuelled by Brenner (1998), did not, as might be expected, focus on the empirical specificity of this conjuncture. Rather, the debate centred upon widely different interpretations of Marx's theory of value and surplus value (see, for example, various contributions in *Historical Materialism*, Issues 4–5; the editorial introduction is reproduced in the Appendix to this thesis). If philosophy and method are to prove their worth then they must be able to *inform* theory and practice. As chapters 6 and 7 demonstrate, materialist dialectics does indeed help in this regard. Materialist dialectics can help to explain, and overcome theoretically, some of the fundamental reasons behind the stifling of the collective development of a Marxist theory of contemporary global capital.

As argued in chapter 6, materialist dialectics identifies the value-form as the 'cell-form' of capitalism. In this regard, there are important parallels with contemporary and Hegel-inspired systematic dialectics. Unlike idealist variants of systematic dialectics, materialist dialectics is able to uncover the true nature of the cell-form and developments thereof. Marx points out that 'exchange value' must be distinguished from 'value'. The exchange value of commodities implies that they possess some common substance, as which they are 'values', and of which exchange value is the manifestation. Furthermore Marx argues that this substance is labour. Marx's argument is an expression of *materialism*. According to materialism, the powers of objects are aspects of their material form; powers do not spring up on

their own, outside of some definite material form. Yet in exchange, all palpable material determinations of commodities are 'abstracted from'. In other words, the magnitude of exchange value bears no systematic relation to any palpable material property of the commodity. For a materialist, the phenomenon of exchange value is therefore deeply puzzling. Yet there is a 'residue' left after abstraction from all palpable material properties. Each commodity (at this level of abstraction) is an embodiment, an objectification of labour, requiring a definite quantity of socially necessary labour time. This quantity is not totally 'abstracted from' in exchange. In other words, there may be a systematic relationship between labour time and exchange value, though it is evident that this relation will not be one of strict proportionality. Materialism requires that exchange value *must* be underlain by some material property. Hence, by elimination, socially necessary abstract labour time is the common and quantitatively determinate material aspect of commodities manifested in their exchange value. Accordingly, the substance of value is socially necessary abstract labour. Further theoretical development must fathom the *systematic* deviations from proportionality between labour times and exchange values. Lacking the premise of materialism, contemporary and Hegel-inspired systematic dialecticians provide no clear rationale for Marx's argument, and many systematic dialecticians reject it outright, as does 'value form theory' in general, without offering an adequate alternative. Thus *dialectics* is necessary to help comprehend important notions such as 'method of enquiry' and 'method of presentation' but dialectics is insufficient to comprehend value and hence to comprehend capitalism. Only *materialist dialectics* can do this.

Systematic dialectics is one of the few contemporary interpretations of Marx that recognises the importance of the value-form development subsequent to Marx's initial discussion of the cell-form. However, as argued in chapters 6 and 7, contemporary and Hegel-inspired systematic dialectics, lacking a grasp of the notion of labour as the substance of value, is, at best, indifferent to the *raison d'être* of Marx's value-form development, viz. the necessity for congealed abstract labour to gain a form of appearance. The most important outcome of Marx's development, achieved in chapters 5 and 6 of *Capital*, is the demonstration that the distinctive characteristic of capital, viz. surplus value, is the manifestation of capitalistic exploitation. Nowhere within the contemporary literature on systematic dialectics is

an adequate exposition of surplus value and exploitation to be found, that is congruent with Marx's own. Within the wider literature a number of interpretations mistakenly take the labour theory of value as a fixed axiom upon which Marx's demonstration of capitalistic exploitation is based. Once again, materialist dialectics is able to shed light on crucial issues of theory, in this case the theory of surplus value. The creative and transformative nature of labour, detailed by materialist dialectics, confirms that there is a transhistorical as well as an historical aspect to the notion of value creation and that the *articulation* of both aspects is required to grasp Marx's argument on surplus value. In *all* societies labour is creative and transformative. In capitalist society, where value comes into general existence, such creative and transformative power is the only possible source of surplus value. This distinctive quality ensures that the only contribution to the product not paid for by the capitalist, on purchase of the inputs, is the contribution of labour. Surplus labour is the *cause* and *substance* of surplus value, *therefore* it is the necessary and sufficient (ignoring realisation problems) condition for the monetary forms of surplus value, viz. profit, interest and rent.

As demonstrated in the latter sections of chapter 7, the materialist and dialectical interpretation of Marx's theory of value and surplus value can be developed in order to grasp the three Volumes of Marx's *Capital*. Crucial to this interpretation is the comprehension of Marx's distinction between of different 'compositions of capital'. Given the distinction of 'organic' and 'value' compositions the much discussed transformation 'problem' is not a problem at all, rather the transformation is a further development and substantiation of the labour theory of value (Saad-Filho 1997b; 2002).

This thesis focuses upon only the most abstract and simple aspects of philosophy and theory. There is much scope for more concrete developments, and for further engagement with the vast range of relevant literature. For example Hegel's own writings have not been scrutinised within the thesis. Thus the thesis opens up many avenues for the development of materialist dialectics and Marxism at the level of philosophy, method and theory. Simultaneously, the thesis shows the superiority of materialist dialectics over both critical realism and new dialectics at all of these levels. The thesis also affirms that Marxism does not await a perfect philosophy and

abstract theory, before it can provide true comprehension of contemporary global capitalism. For, the relationship between theory and philosophy runs both ways: philosophy should inform theory and theory should inform philosophy. Thus the argument has drawn from, and attempted to provide the necessary philosophical, methodological and abstract theoretical support to, indeed deepening of, the many *extant* Marxist writings on contemporary global capitalism by Fine, Saad-Filho, Weeks and others. This concrete work can be developed significantly in light of the abstract arguments of the thesis. At the same time, the thesis has contributed towards the removal of the philosophical, methodological and theoretical barrier that stands in the way of the wider dissemination and comprehension of this work, viz. the antipathy towards materialist dialectics across Marxism and the social sciences. In short, a return to Marx's materialist dialectics would constitute a vital step towards the comprehension of global capitalism.

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Appendix

Editorial Introduction to *Historical Materialism*, Issue 4, Symposium: Robert Brenner and the Worlds Crisis (Part 1), 3–7

The world economic crisis of 1998 provided a perfect environment for another exercise of Robert Brenner's skills as controversialist. These he had already demonstrated in the now-classic 'Brenner debate' on the transition from feudalism to capitalism, as well as in his devastating critique of the regulation school a decade ago. Deploying his characteristic combination of self-confidence and conceptual forcefulness, Brenner has launched on the world a magisterial and thoroughly researched reinterpretation, both of the post-war history of world capitalism and of the Marxist theory of crisis. Whether or not one agrees wholeheartedly with this account, there can be no doubt that both in its timing and its form it has served as a powerful catalyst in stirring up renewed debates among Marxists on the causes, nature and consequences of capitalism's recurrent tendency to crisis. Even those who profoundly disagree with Brenner admit that the discussion stimulated by his provocative account has served as an invaluable stimulant and goad for others to provide what they see as a more adequate and comprehensive theory. This in itself is an enormously important contribution.

This is the first part of a symposium in which leading Marxists address the explanation of global crises with reference to Brenner's text. This cashes out, in some way, the promissory note we proffered in the previous issue of *Historical Materialism* to address questions of political economy. Given the richness and variety of the contributions we received, we have taken the exceptional step of spreading this symposium over two issues. The following issue will therefore continue the discussion, with articles by Werner Bonefeld, François Chesnais, Alan Freeman, Michel Husson, Anwar Shaikh, Tony Smith, Richard Walker and John Weeks. Robert Brenner has also promised us a response for this issue.

Of course, despite the contributors' diverse backgrounds and perspectives, some aspects of their criticism of Brenner converge. However, we have made the decision not to edit out such overlapping, as we felt it important that each contribution to the

debate be self-standing. We believe that the value of each contribution to the debate outweighs some small degree of repetition, and we hope readers will agree.

As a general introduction we highlight four themes uniting these very diverse articles: (i) they attempt to uncover the long-run and system-wide causes of the recent crisis and of future tendencies of the world economy; (ii) they can justifiably claim to overcome the antinomies of mainstream thought, avoiding both dogma and 'post-Marxist' folly; (iii) they make vivid and relevant the perennial debate within Marxist economics on value theory and on the falling rate of profit; (iv) they underline the interdisciplinary nature of Marxism – with all the benefits and costs entailed.

The long-run and system-wide causes of crisis

Brenner stresses the system-wide and long-run perspective of Marxism. This is a wide angle eschewed by postmodernism, yet manifestly essential to the full comprehension of global capital. It is also a view embarrassing to a mainstream economics that is unable to fathom the apparent universal power taken on by money under capitalist social relations. The contributions to the symposium embrace the broad perspective, in very different, and sometimes opposing, ways. They do not attribute the fundamental causes of the recent crisis merely to the mistakes of individual governments, financial institutions or other contingencies, as in orthodox explanations. Instead, any such mistakes form part of a broader picture. Two phases of post-war development stand out: a period of relatively rapid expansion of the advanced economies in the 1950s and 1960s, followed by a period of significantly slower growth triggered (but not caused) by the oil-shock of 1973 and lasting up to the present day. The respective explanations offered can be summarised as follows.

There is near unanimous agreement with Brenner's refutation of the view that rising workers' strength lies behind the secular downturn. Brenner marshals a wealth of evidence against the theory that the power of labour to push up or to maintain the level of the wage, and to lower productivity through slackening of effort levels or opposition to change at the workplace, causes the falling rate of profit and so the long down turn. This argument is very important given that the most prominent

developments in crisis theory of the past twenty years – the ‘social structure of accumulation’ school and ‘regulation theory’ – emphasised worker strength as an explanation for the downturn. Brenner recognises that even when and where the condition of labour is characterised by relative weakness, crisis is still endemic. This emphasis on relative weakness is central to the accounts offered by Clarke and Lebowitz. This is strikingly different to the mainstream and media consensus that sees union strength as the source of all economic ills.

Brenner’s own view, defended by Wood, below, is that the intensity of world competition within the manufacturing sector, as both Japan and West Germany steadily caught up with the US in the post-war period, led to the rapid and unforeseen obsolescence of masses of US fixed capital. It was this that generated the falling rate of profit from the mid-60s and hence a crisis. Brenner argues that the crisis became a secular downturn because the sunk costs of US manufacturers, combined with Keynesian fiscal policies, ensured there was insufficient exit from the industry, even as new entry from other economies, such as the Asian ‘tigers’, further intensified competition.

For Duménil and Lévy, a secular decline in the physical productivity of capital, due to unfavourable technical change, lies at the heart of the falling rate of profit and resulting crisis. Ongoing class struggle over wages helps explain variations around the secular trend. This view comes nearest to that of the regulation approach within the symposium, especially given that Duménil and Lévy consider institutions to have a central role in mediating class struggle.

Both Moseley and Smith forward the much-debated distinction between productive and unproductive labour as key to profit-rate decline. According to these authors, a secular rise in the proportion of labour that is unproductive of surplus-value has occurred which has taken its toll on the rate of profit. Moseley suggests that, *inter alia*, the inherent inability of technological advance to replace sales functions (which are necessary but unproductive of value according to Moseley’s argument) is one recent factor contributing to the relative increase in unproductive labour.

Harman, endorsed by Callinicos, argues that the notion of a 'permanent arms economy' can explain the trends in the rate of profit and so global economic development. On this view, military spending serves to dampen accumulation which would otherwise, in the absence of other countervailing factors, raise the ratio of constant to variable capital and hence lower the profit rate and generate crisis. The high US (and USSR) military spending in the 1950s and 1960s is the key to explaining the relative success of the period. The concomitantly growing competitiveness of West Germany and Japan explains the downturn.

Clarke is one of the few dissenters from the view that the magnitude of the rate of profit is central to crisis theory. He argues that Brenner is right to stress over-production and over-accumulation but that Brenner provides no substantiation of just why the process of accumulation should necessarily tend to overheat (a criticism also made by Laibman, Carchedi and others). Clarke summarises his own interpretation of Marx's crises theory where the role of fixed capital and of money and credit are integrated. Carchedi also develops a crisis theory which incorporates the role of money and credit and suggests briefly how exchange-rate theory might also be incorporated.

Overcoming the antinomies of mainstream thought

Brenner stresses competition between capitals (the 'horizontal' relations between different capitals). Lebowitz argues that Marx, by contrast, and for good reason, emphasises the ('vertical') struggle between capital and labour at the level of 'capital-in-general' – a level which is 'essential' such that competition is merely the illusory form in which capital appears to the individual. It is just this claim that Wood – like Brenner – contests. It is competition, not capital-in-general, that has causal (and historical) priority according to Wood. This sort of debate, between two historians and a number of economists and philosophers is rare but very revealing, and is one we hope to encourage. The debate over horizontal and vertical relations relates to the antinomies of social theory. Take, for example, the structure-agency opposition. Brenner states that he wants a reconciliation of structural laws and agents' motivations. And, indeed, we do not find a rigid split or failure of interpenetration of the two. The critic will search the symposium in vain for the

article (an introduction that Brenner does not endorse), that Marxist debates regarding value theory and the falling rate of profit are stale, mechanistic and generally involve outmoded deductions with no basis in social reality.

Interdisciplinarity

Brenner overarches history and economics. This intrinsic interdisciplinarity has opened the field for a great variety of disciplinary perspectives on these questions. Writers traditionally specialising in history, sociology, philosophy, politics, as well as economics, have all participated in this debate. This new 'Brenner debate' has highlighted difficult philosophical arguments over method and history, and the suspicion or even fear of mathematics or value theory debates amongst some non-economists. These continued points of tension between economists and others illustrate the recalcitrance of academic disciplinary boundaries.

We can examine this problem more closely through the lens of Brenner's relation to Marx's value theory. Whichever position one takes on this question, it is clear that further debate across disciplinary divides is vital (as Laibman's contribution points out). There is a clear split such that no economist in this symposium agrees with Brenner's theory. All his supporters are outside of the economics profession. Also, all economist contributors interpret Brenner as rejecting Marx's value categories, yet Brenner himself insists he does no such thing. Some of the non-economist contributors espouse Brenner's view regardless (Wood); some are willing to attribute Marx's value theory to Brenner (an excellent example being Tony Smith, whose contribution is to be published in the next issue). Overall, then, we must recognise the tenacious existence of bourgeois academic disciplinary boundaries – the different tacit assumptions and histories they institutionalise – even as, and in the process of, breaking them down.